VOLUME 5 DATA MANAGEMENT STUDY

APPENDIX **E**CONTRACTOR DATA PACKAGE QUALITY ASSURANCE (QA)

PRE PARED BY

T.F. SMYTH
J.R. GOTTSHALL

QUALITY ASSURANCE MANAGEMENT
VOYAGER SPACECRAFT SYSTEM PROJECT

APPROVED BY

A. Frank, Cognizant Engineer
Data Management and Control Task
Voyager Spacecraft System Project

PREPARED FOR

JET PROPULSION LABORATORY
CALIFORNIA INSTITUTE OF TECHNOLOGY
4800 OAK GROVE DRIVE
PASADENA, CALIFORNIA

UNDER JPL CONTRACT No. 951112



Valley Forge Space Technology Center P.O. Box 8555 • Philadelphia, Penna. 19101

TABLE OF CONTENTS

Section	n	Page
1	INTRODUCTION	. 1–1
2	DATA ITEM LIST/USER MATRIX.	2-1
3	USER FLOWDIAGRAMS	3-1
4	DATA REQUIREMENT DESCRIPTIONS (DRD'S)	4-1
5	DOCUMENTATIONRELATIONSHIPTREES	5-1
6	DATA ITEM PHASING/FREQUENCY	6-1

INTRODUCTION

This appendix presents the Contractor Data Package (Data Item Matrix, Data Requirement Descriptions, User Flow Diagram, Document Relationship Tree, and Frequency and Phasing Charts) for Quality Assurance (QA).

These data include control and review procedures to ensure that component, subsystem, and system design, manufacture, assembly, and testing will produce items that meet the established specifications. This category also includes manufacturing verification tests to obtain quality assurance.

The complete list of Contractor Data Package appendixes is-as follows:

```
Appendix A - Technical Description and System Engineering (SE)
```

Appendix B - Planetary Quarantine (PQ)

Appendix C - Manufacturing (MG)

Appendix D - Configuration Management (CM)

Appendix E - Quality Assurance (QA)

Appendix F - Test (TE) and Mission Operations (MP)

Appendix G - Reliability Assurance (RA)

Appendix H - Logistics and Support (LS)

Appendix I • Overall Management (MA), Scheduling (SC), Manning and Financial (MF)

Appendix J - Procurement and Contracting (PC)

Appendix K - Data Management (DM)

Appendix L* - Facilities (FA)

Appendix M* - Safety (SA)

Appendix N* - Site Activation for Launch (AL)

Appendixes L through Q prepared under Contract NAS 7-584

Appendix O* - Science (SI)

Appendix P* - Related Project Interfaces (RP)

Appendix Q* - Advanced Missions (AM)

^{*} Appendixes L through $\it Q$ prepared under Contract NAS 7-584

	1 of 4	
DATA ITEM NUMBER	DATA ITEM QUALITY ASSURANCE	DESCRIPTION
	MANUALS	
QA- 003	Manual, Instrument Calibration and Maintenance	An approved set of procedures for calibration cycle instruments so that reliable data and confidence can ting procedure.
QÁ- 004	Manual, Quality Assurance Operating Procedures	Formalizes the specific requirements of the Quality established operations procedures.
QA- 005	Manual, Special Test Equipment, Component	Controls and maintains the equipment current, nece formance requirements.
QA 006	Manual, Workmanship Standards	Provides visual aids and standards jointly selected I for use during the program.
	MINUTES	
QA- 007	Minutes, Material Review Board	Minutes of formal meetings of the Material Review I
	PLANS_	
QA- 008	Plan, Inspection	Documents the specific parameters of inspection and the required quality levels in fabrication, assembly,
QA- 009	Plan, Quality Assurance Program	The system contractor's total quality plan which med tractual requirements.
QA- 010	Plan, Sampling	Documents and controls the sample size necessary t quality levels.
QA- 011	Plan, Test and Operating, for Special Test Equipment (STE), Component	A detailed checkout and operating procedure for test grity and confidence in the test results. In process checkout equipment.

^{*} KEY INFORMAL DATA

.DATA ITEM LIST/USER MATRIX

						Δ	PPLI	CABI AT	LITY CON	TO ΓRAC	FUNC TOR	CTIOI LEV	NAL EL	USER	S	
	SE	PQ	MG	СМ	QA	TE	RA	LS	ма	sc	PC	ИF	MP	DM	FA	SA
	-											-				
and maintenance cycles for be maintained in the opera-				-	A	U	-	_	-	-		-	-	_	_	-
Assurance Plan into	-	-	U	_	A	U	U	-	-	-	-	_	_	_	_	U
sitated by design and per-	-	_	-	-	A	Ū	-	_		_	-		-	-		_
7 contractor and customer	_	_	A	-	R	_	U	-	-	-	_		-	-	-	-
:																
																
oard (MRB).	U	-	U	-	R	U	U	_	U	_	U		-	-	-	_
the tolerances to maintain						TT						<u></u>				
and configuration.	-	-	U	-	A	U	-	-	U	-			_	_	_	_
ts all the customer con-	U	U	U	-	R	U	R	-	РМ		U	<u></u>	-	-	-	
maintain acceptance	U	U	U	-	A	-	U	_	_		1	_	_	-		-
equipment to maintain inte- est of hardware using bench	U	-		-	A	R	U	_	_	_		_	-	-	-	U

U - USE R - REVIEW AUTHORITY A - APPROVAL AUTHORITY

	APPI CABILITY AT SUBCONTRA								RAC-	AC- LS APPLICABILITY TO PROJECT BOARDS												
				TOF		· · · · · · · · · · · · · · · · · · ·	PPLIE	R LE	VELS	7	,	, LIC	JIL			NOJE	-01 6	JOAR	J.3			
AL	SI	RP	АМ	PRINCIPAL SUB- CONTRACTORS	MAJOR SUB- CONTRACTORS	KEY SUBCON AND VENDORS	OTHER VENDORS	KEY SUPPLIERS	KEY SUBSUPPLIERS	CONFIGURATION CONTROL	CONFIGURATION MANAGEMENT	DATA REVIEW	DESIGN REVIEW	FAILURE REVIEW	INTEGRATED SAFETY	INTEGRATED TEST	MAKE OR BUY	MATERIAL REVIEW	SOURCE EVALUATION	SOURCE SELECTION		
										*					-			į				
U	-	- :	-	s	S	s	NA	NA	NA	_	-	_	-	-	-	-	-	-	-			
U	-	•		C/S	C/S	(C/S)	NA.	 (C/S) 	NA.	-	-	-	1	-	<u>-</u>	-		_	-			
U	-	-	-	s	S	ន	NA	NA	NA	-	-	-	-		-	-	-		_	_		
U	-	_	_							_		_		1		U	-	-	_	-		
									٠													
	ŧ													-								
	-		-	(S)	(S)	(S)	NA	(S)	NA			-	-	· . _	_	U		A		-		
										:						:						
,																						
	_		_	s	s	s	NA	(S)	(S)	-	_	-	-	_	_		-	_	_	-		
U	U		_	s	s	s	s	s	s	_	-	_	_	_	_	-		-	-	_		
_	_		-	s	s	s	s	s	s	-	-	-	_		-	U	_		_	_		
	U	_	-	s	S	(S)	NA	NA	NA	_	_		_	_	_	R	_	_	_	_		

⁻ PREPARED BY CONTRACTOR

1

	2 of 4	
DATA ITEM NUMBER	DATA ITEM	DESCRIPTION
	QUALITY ASSURANCE	
	PROCEDURES	
QA- 012	Procedure, Process Control	Essential process controls needed to supplement the procedure.
QA- 013	Procedure, Test/Inspection	Specific test and inspection procedures to be perfor contractor.
QA- 014	Procedure, Rework	
QA- 015	Procedure, Area Control	
	RECORDS	
QA- 016	Record, Calibration	
QA- 017	Record, Shelf Life	
QA- 018	Record, Tool and Gauge Usage	
QA- 019	Record, Test {Materials, Parts, Sub-Assemblies}	
QA- 001	Logbook, Component	A chronological and historical record used in review status, solving of anomalies and verifying acceptanc component reauirements,
QA- 002	Logbook, Vehicle	To verify to the customer the chronological and histofor the vehicle presented for buy-off.

^{*} KEY INFORMAL DATA

DATA ITEM LIST/USER MATRIX

						A	\PPLI	CAB AT	LITY CON	TO TRAC	FUNC TOR	CTIOI	NAL I	USER	S	
	SE	PQ	MG	СМ	QA ·	TE	RA	LS	МА	sc	PC	MF	MP	DM	FA	SA
est and inspection	_	-	U	_	A	-	_	-	U		_	_	-	-	_	U
ed by the system		Ú	U	-	A	U	U	-	U	_	-		_	_	_	U
	-	_	U	_	A	-	-		-		-	-	-	_	_	-
	_	R	U		R	U	U	U	РМ	_	_	_	_	_	-	U
											-					
													-			
	_	_	-	_	A	U	_	-	-	-		_	_		_	_
		U	U	-	A	U	U	_	-	-	-	_	_		-	
	-	-	U	_	A	-	_	_	_	-	-		_	_	_	-
	_	. –	U	_	A	U		-	-	-	_	-	-	-	-	-
ng component criteria for the	_	_	-	_	A	U	R	_	-	_	-		-	-	_	-
rical acceptance	U	-	_	-	Α	R	R	R	R	-	U	-	U	-	_	-

U - USE

R - REVIEW AUTHORITY

A - APPROVAL AUTHORITY

	APPLICABILITY AT SUBCONT										AP	PLIC	ABIL	ITY	TO F	PROJE	ECT I	BOAR	DS	
- 1				PRINCIPAL SUB- CONTRACTORS	MAJOR SUB- CONTRACTORS	KEY SUBCON AND VENDORS			KEY SUBSUPPLIERS	CONFIGURATION	CONFIGURATION MANAGEMENT			ш_	ATED Y	RATED	oR	IAL V	E	FION
AL_	SI	RP	AM	PRINCIF CONTR	MAJOR CONTR	KEY SU AND VE	OTHER VENDORS	KEY SUPPLIERS	KEY SUBSUR	CONFIG	CONFIG	DATA REVIEW	DESIGN REVIEW	FAILURE	INTEGRATED SAFETY	INTEGRATED TEST	MAKE	MATERIAL REVIEW	SOURCE	SOURCE SELECTION
-	1		-	s	S	S	(S)	s	(S)	-		1	•	-	1	-	-	U		-
_	-	-	_	s	S	S	(S)	S	(S)	.	-				-	U	-		_	-
	_	-	_	s	S	s	(S)	s	(S)		-	-	_	-	-	_		U		-
-	-	-	_	(S)	(S)	(S)	NA	(S)	(S)	-	_	.=	1	-		U	-	_	_	-
,														:						
	i i									·										
	_		_	S	s	s	(S)	(S)	(S)	-	_	-	-		-	U	-	_	_	-
	-	_	_	(S)	(S)	(S)	(S)	(S)	(S)	_	-	_	_	-	-	U	_	_	_	-
	-	-	_	(S)	(S)	(S)	ΝA	NA	NA	-	-	-	-	-	-	-	_	-	-	-
***	-		-	s	S	s	s	s	s	_	-		-	_	_ _	U	 	-	-	-
	_		_	s	s	s	s	s	s	_	-		-	-	_	U		_	-	-
	IJ	-	_	NA	NA	NA	ΝA	NA	ΝA	_	-	-	-	_	-	R	-	-	_	
										-										
	<u> </u>	L	L	L	L	L	L	Ļ.,	Ļ	L		L	1	نــــن		L	L	L	L	L

	3 of 4	
DATA ITEM NUMBER	DATA ITEM	DESCRIPTION
	QUALITY ASSURANCE	
	REPORTS	
QA- 020	*Report, Failure Analysis	Documentation of the investigatory analysis of nonciproblem cause, and prevention.
QA~ 021	*Report, Nonconforming Material (NCMR)	A document to report nonconformance in fabrication assembly, and inspection and the cause, corrective and disposition.
QA- 022	*Report, Process Trends	Identifies shifts in quality levels during processes s corrective action can be taken.
QA- 023	*Report, Quality Audit	Measures the level of compliance in all areas of fab assembly and test to the governing quality document
QA- 024	*Report, Quality Status	A report of the system contractor's quality perform; submitted to the customer.
QA- 025	Report, Special Measurement and Test Equipment Evaluation (Component)	A special capability study of test equipment to verify and confidence in test and inspection results
QA- 026	Report, Quality Assurance Audit Summary	Summary of the audits verifying compliance in fabric testing, inspection, to specific control documents.
QA- 027	Report, Quality Assurance Trend Summary	Summarization of QA trend reports to determine any quality levels and to emphasize corrective action.
QA- 028	Report, Break of Inspection	Identifies the break of inspection event which causes processing to be stopped and verifies that all material a component is maintained as prime.
QA- 029	*Report, Failure Categorization	An analysis report categorizing failures and assigning for failures to design, component, fabrication, or te
QA- 03 0	Report, Qualification Status	Reports the status of the type approval (TA) program customer.

^{*} KEY INFORMAL DATA

DATA ITEM LIST/USER MATRIX

						A	PPLI	CABI AT	LITY CON	TO TRAC	FUN TOR	CTIOI LEV	NAL EL	USER	S	
	SE	PQ	MG	СМ	QA	TE	RA	LS	мА	sc	РС	MF	МР	DM	FA	SA
formance,	u	u	U U	_	R	U	A	-	Ū	•	-		-	-	_	U
test, ction,	-		U	_	A	U	U		U		_	-	_	-	_	-
that	Ω		U		А	-	U		U	_	-	_	-	_	-	-
cation,	U	-	U	-	A	U	U	_	U	_	U	-	-	-	_	U
me	U	_	U	-	А	U	U	U	U	-	U	-	_	-	_	-
integrity	u	u	-	_	A	R	_		_		U	-	-	-	-	-
ution,	u	u	U	_	А	U	U	_	U	-	U	-	_	_	-	-
shifts in	U	 -	U		А	-	U	_	U	_	U	_	-	_	_	-
nardware l within		U	_	_	A	U	-	-	-	_	_	-	_		_	-
; responsibility t.		_	U	_	A	R	U	_	U	_	_	_	-	_	-	-
to the	Ū	-	U	-	A	R	U		U	-	U	_	-	-	_	-
			-			_										
						_										

U - USE

R - REVIEW AUTHORITY

A - APPROVAL AUTHORITY

PAGE NO. 3 of 4

	APPLICABILITY AT SUBCONTR TOR/VENDOR/SUPPLIER LEV								RAC- VELS	1	AP	PLIC	ABILI	ITY	TO P	ROJE	ECT E	BOARI	DS	
: 				PRINCIPAL SUB- CONTRACTORS	SUB- CTORS	SCON	S	ERS	PLIERS	JRATION L	RATION MENT				ATED	ATED	oR	AL.	TION	NOI
۱L	SI	RP	ΑМ	PRINCIPA CONTRA	MAJOR SUB- CONTRACTORS	KEY SUBCON AND VENDORS	OTHER VENDORS	KEY SUPPLIERS	KEY SUBSUPPLIERS	CONFIGURATION CONTROL	CONFIGURATION MANAGEMENT	DATA REVIEW	DESIGN REVIEW	FAILURE REVIEW	INTEGRATED SAFETY	INTEGRATED TEST	MAKE O BUY	MATERIAL REVIEW	SOURCE EVALUATION	SOURCE SELECTION
:						:										:	-			
U	U	-		S	s	s	NA	(S)	(S)	_	1	-	ł	R	-	U	-	U	-	-
U		-	1	S	S	S	s	s	S	-	-	_	-	-		U	. 	U	-	
_		-	-	s	ន	(S)	ΝA	ΝA	ΝA	_	_	_		-	_		_	_		-
U	1	-	_	s	S	s	NA	(S)	ΝA	-		_		-	-	U	-	U	_	_
-	-	-	-	s	s	S	NA	(S)	NA	-	-	-	_	-	_	U	-	-	_	-
-		_	_	s	S	(S)	NA	ΝA	ΝA	-	-	-	_	_	-	U	_	-	-	-
-	_	_		NA	NA	ΝA	ΝA	ΝA	ΝA	-	-	_	_	-		_	-	U	_	-
U	-		-	NA	NA	ΝA	ΝA	NA	NA	-	_	-	-	-	_	-	_	-	-	-
-		_	_	s	s	s	NA	(S)	(S)	_	_		_	_	-	υ	-	_	-	-
u	_	-	_	s	s	S	NA	NA	NA	-	_	-	-	_	-	R	-	-	-	-
	_	_	-	(S)	ΝA	NA	NA	NA	NA	-	-	-		_	-	U		U	-	-

_ PREPARED BY CONTRACTOR

S - PREPARED BY SUBCONTRACTOR/VENDOR/SUPPLIER () - OPTIONAL APPLICATION NA - NOT APPLICABLE

	4 of 4	
DATA ITEM NUMBER	DATA ITEM QUALITY ASSURANCE	DESCRIPTION
	SPECIFICATIONS	
QA- 031	Specification, Special Test Equipment (STE),. Component	

^{*} KEY INFORMAL DATA

DATA ITEM LIST/USER MATRIX

						A	\PPLI(CABI AT	LITY CON	TO TRAC	FUNC TOR	CTION	IAL (EL	JSER	s	
•	SE	PQ	MG	СМ	QA	TE	RA	_s	ма	sc	PC	MF	MP	DM	FA	SA
		-						**********								
	ប	_		U	A	R	U	<u></u>	-	บ	U	-	-	-	-	U
		_														
			-			-	***************************************									
								-						-		
																
ž								,								
																
	ļ		. 											_		
	_		<u> </u>													
			.								<u> </u>			_		
			.l _					<u> </u>	<u> </u>				O IECT M			1

U - USE R - REVIEW AUTHORITY

A - APPROVAL AUTHORITY

, , , , , , , , , , , , , , , , , , , 				APPLICABILITY AT SUBCON' RACTOR/VENDOR/SUPPLIER IE-ELS						APPLICABILITY TO PROJECT BOARDS										
				PRINCIPAL SUB- CONTRACTORS	MAJOR SUB- CONTRACTORS	KEY SUBCON AND VENDORS			KEY SUBSUPPLIERS	CONFIGURATION CONTROL	CONFIGURATION MANAGEMENT	*	> *	*	INTEGRATED SAFETY	INTEGRATED TEST	OR	NAL W	SOURCE EVALUATION	TION
AL	SI	RP	АМ	PRINCI	MAJOR	KEY SI AND V	OTHER VENDOWS	KEY SUPPLIERS	KEY SUBSU	CONFIC	CONFIG	DATA REVIEW	DESIGN REVIEW	FAILURE	SAFET	INTEG TEST	MAKE OR BUY	MATERIAL REVIEW	SOURCEVALL	SOURCE SELECTION
<u> </u>		-			•											·				-
Y	U	-	-	S	s	(S)	NA	(S)	NA		U	_			1	R	-	•	-	-
									•			·								
										,				:						
	:						:			:										
													:							
:	, in the second									:										
			:					:												
	:	-		,			:	:	-		:				-					
									=							-		-		
									-											
									-											

⁻ PREPARED BY CONTRACTOR

1

S - PREPARED BY SUBCONTRACTOR/VENDOR/SUPPLIER () - OPTIONAL APPLICATION NA - NOT APPLICABLE

USER FLOW DIAGRAMS

The Quality Assurance Data User Flow Diagrams were developed to show the quality activities and required data items on Voyager to meet customer requirements (NPC 200-2, 3, 4) and the needs of a long-life space system quality program. Interfaces with the systems office, the contractor Voyager project, and procurement sources have been indicated from contract award through launch. The quality assurance data items shown in the diagrams agree with Voyager data item lists.

Early attention is devoted to the quality assurance program plan, conducting special quality system studies, and obtaining rapid integration of major subcontractor quality programs into the prime contractor quality assurance system; Continuous from the systems design phase through launch, key quality activities are:

SDR through PDR

- e Develop parts qualification plan
- e Review specifications and drawings
- e Initiate training program
- Monitor breadboard activities
- e Establish procurement source (supplier) evaluation system

PDR through HDR

- e Begin parts and process qualifications
- e Finalize Quality Assurance Operating Procedures Manual
- e Initiate component special test equipment design
- e Calibrate tools and gages
- e Continue certification of personnel
- Establish QA engineer residents at major subcontractors
- Monitor model fabrication and tests

MDR through CDR

- Continue test plan development
- Conduct failure analyses
- e Inspect engineering model procurement, fabrication and tests
- e Conduct audits

1

e Review purchase requisitions for TA and PTM hardware

CDR through FACI

- o Update procedures and processes
- o Update component STE
- o Continue STE, tool and gage calibrations
- Inspect TA and PTM fabrication and tests
- o Review process trends and conduct failure analyses
- o Compile documentation, including deviation data for FACI

FACI through MAR

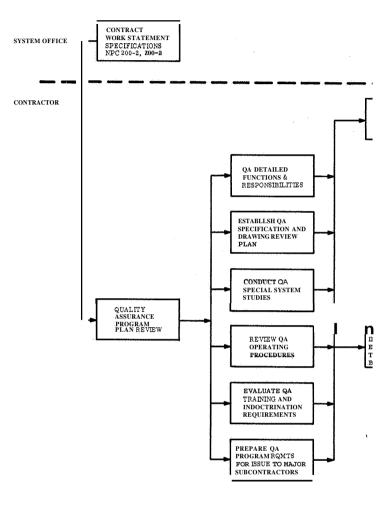
- o Prepare launch operations QA plan
- o Implement defect preventive measures evolving from FACI
- o Perform FA and OSE in-process inspection test and certification
- o Conduct failure analyses
- o Compile Mission Acceptance Review documentation
- o Review status of each vehicle

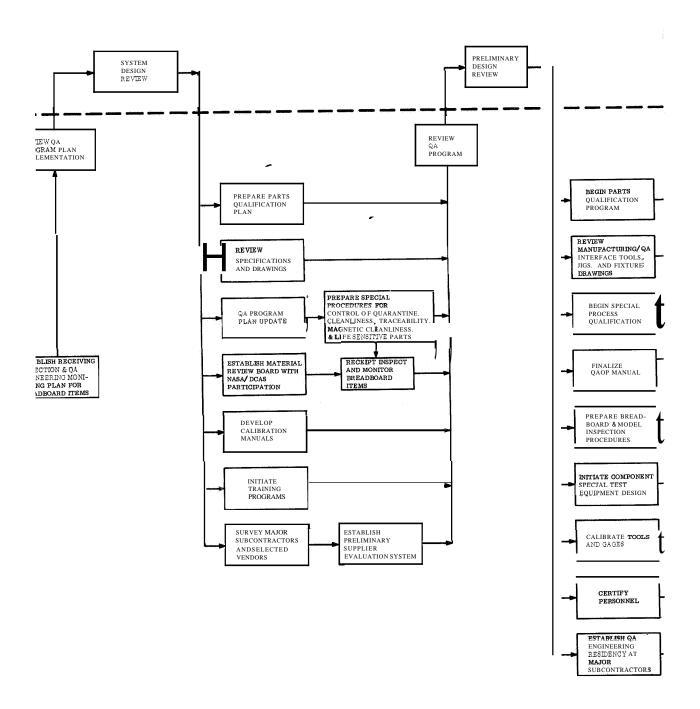
MAR through Launch

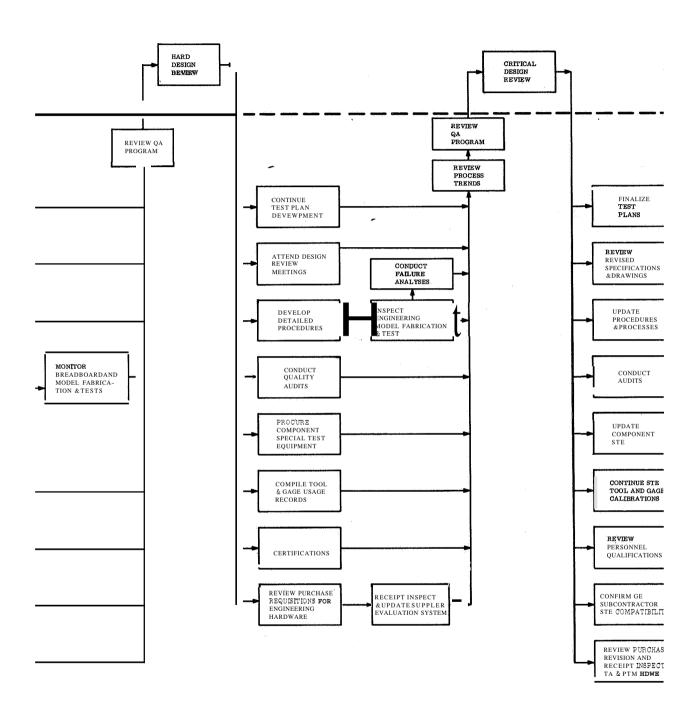
- o Inspect shipments of FA, OSE and STE
- o Receipt inspection at launch site
- o Monitor pre-launch tests
- o Provide QA data for problem solving areas

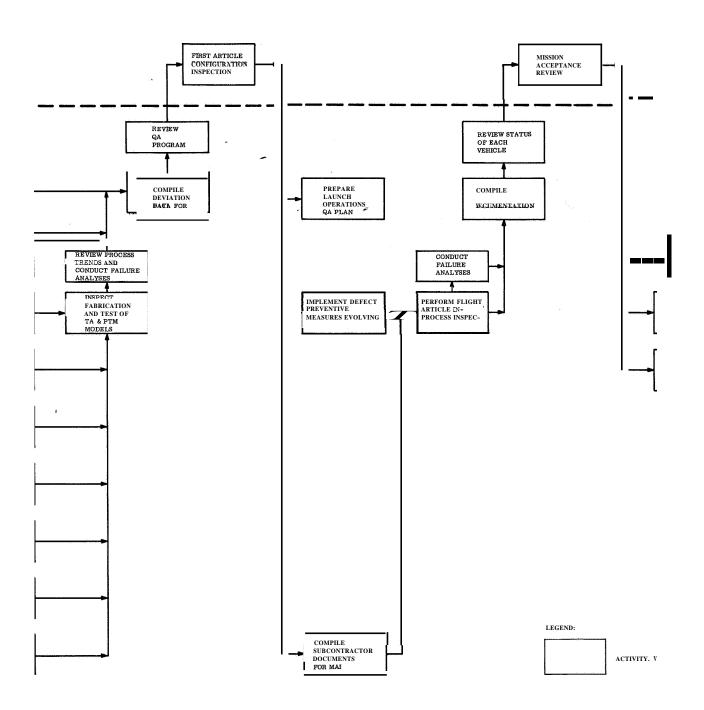
Quality Assurance User Flow Diagrams

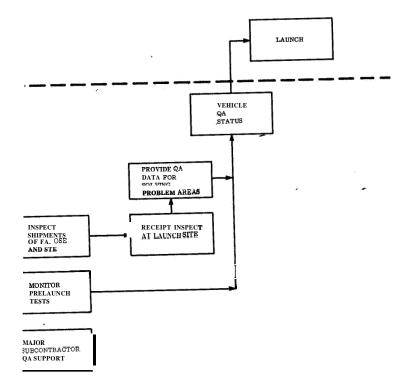
Figure Number	<u>Title</u>						
E-1	Quality Assurance User Flow Diagram - Summary						
E-2	Quality Assurance User Flow Diagram — Contract Award Through Preliminary Design Review						
E-3	Quality Assurance User Flow Diagram - Preliminary Design Review Through Critical Design Review						
E-4	Quality Assurance User, Flow Diagram — Critical Design Review Through Launch (2 sheets)						







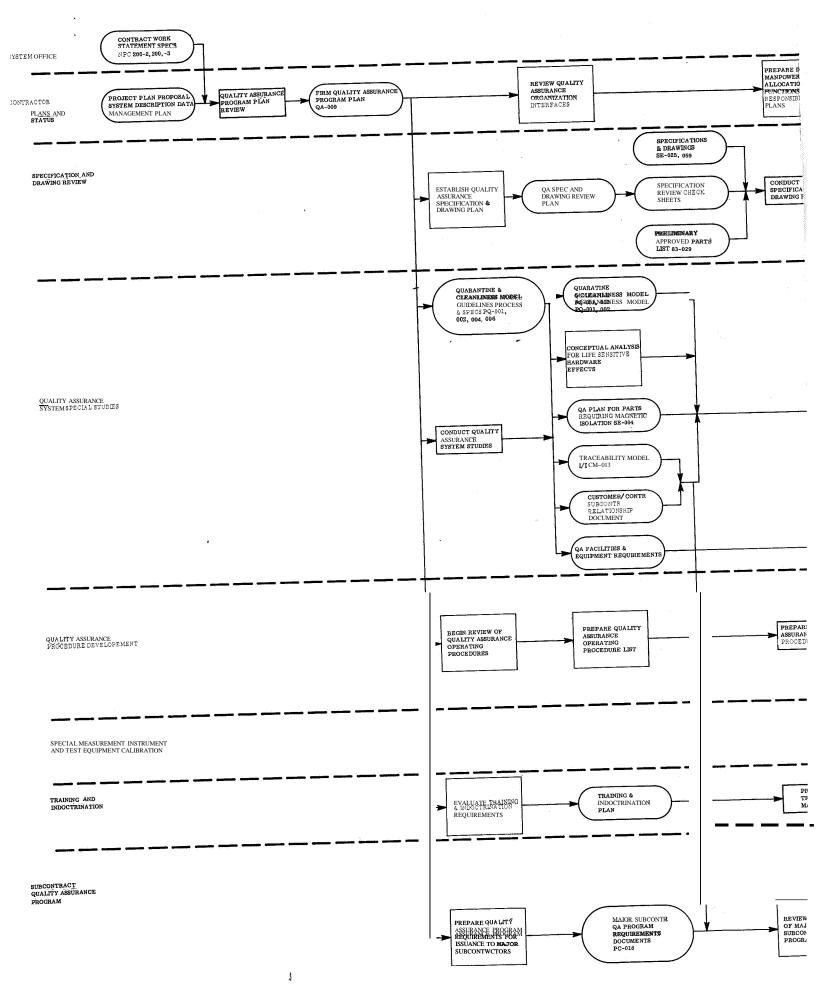


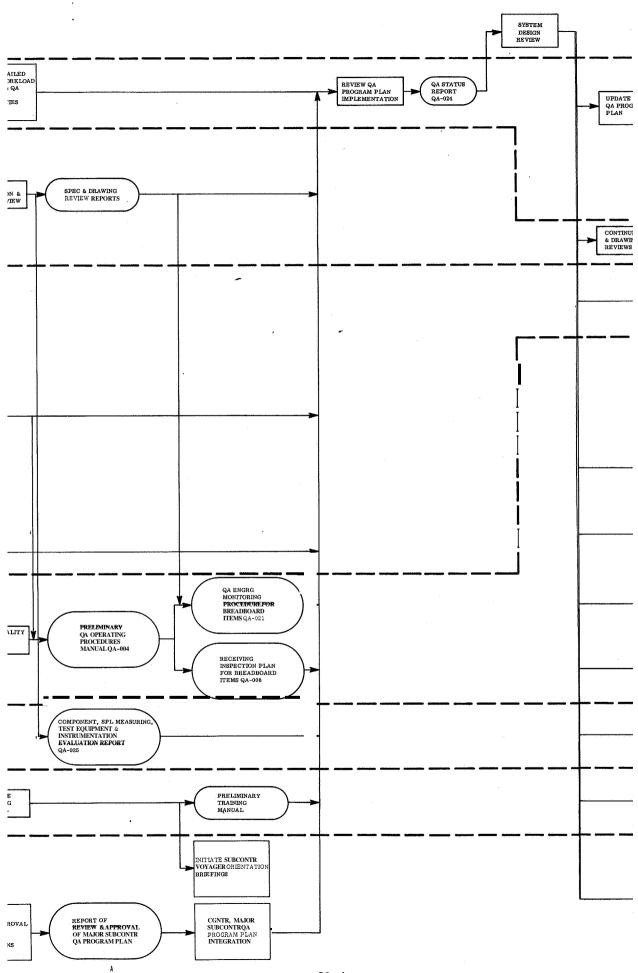


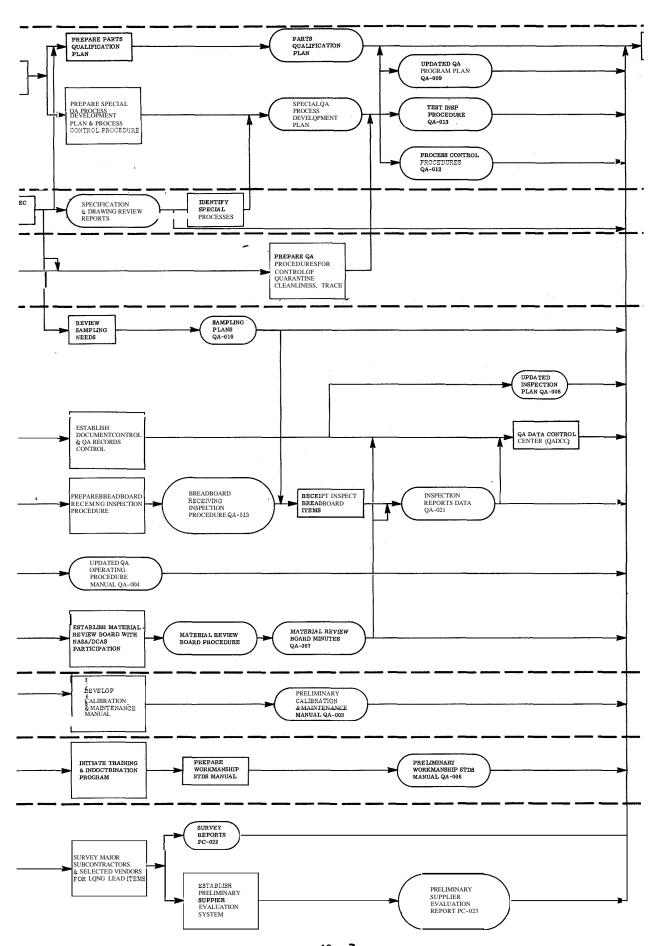
TH DESCRIPTION INSIDE

Figure E-1. Quality Assurance User Flow Diagram - Summary









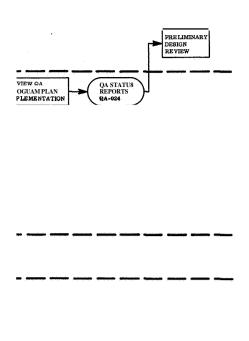
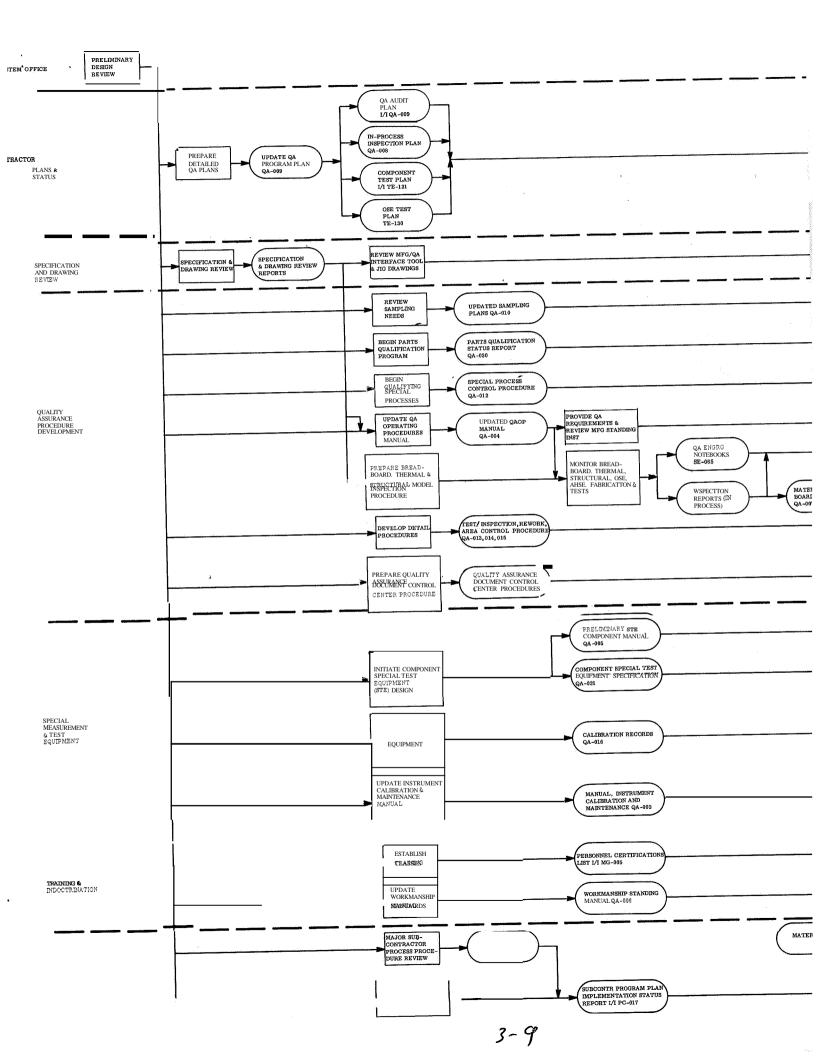
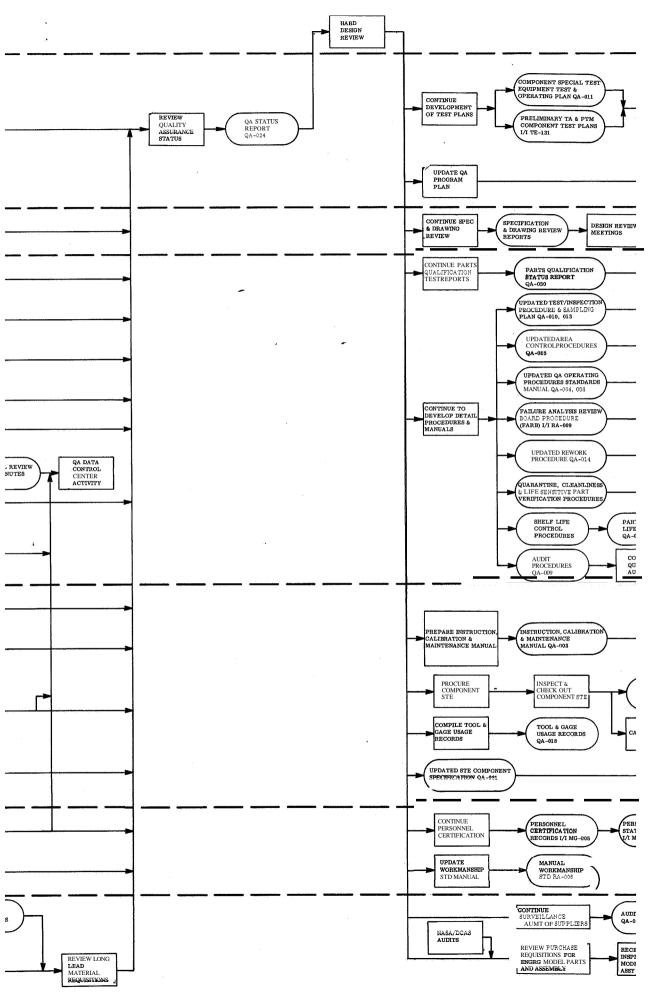
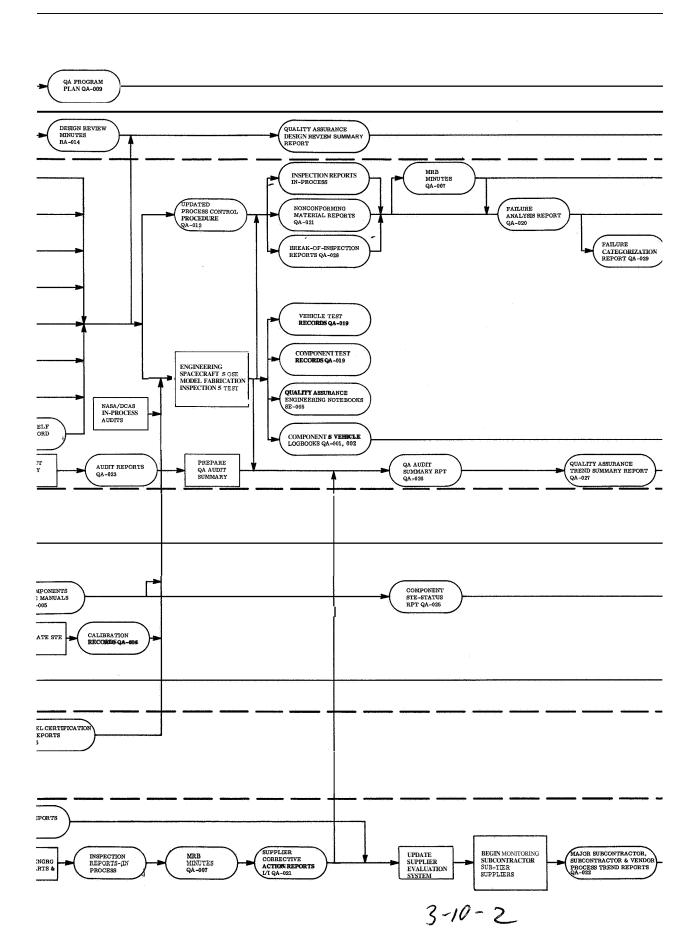


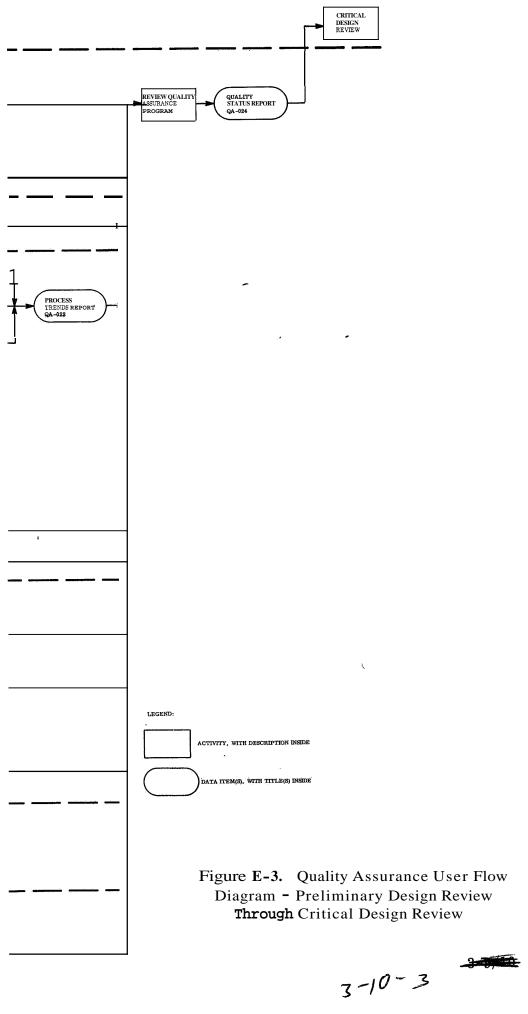


Figure E-2. Quality Assurance User Flow Diagram - Contract Award Through Preliminary Design Review

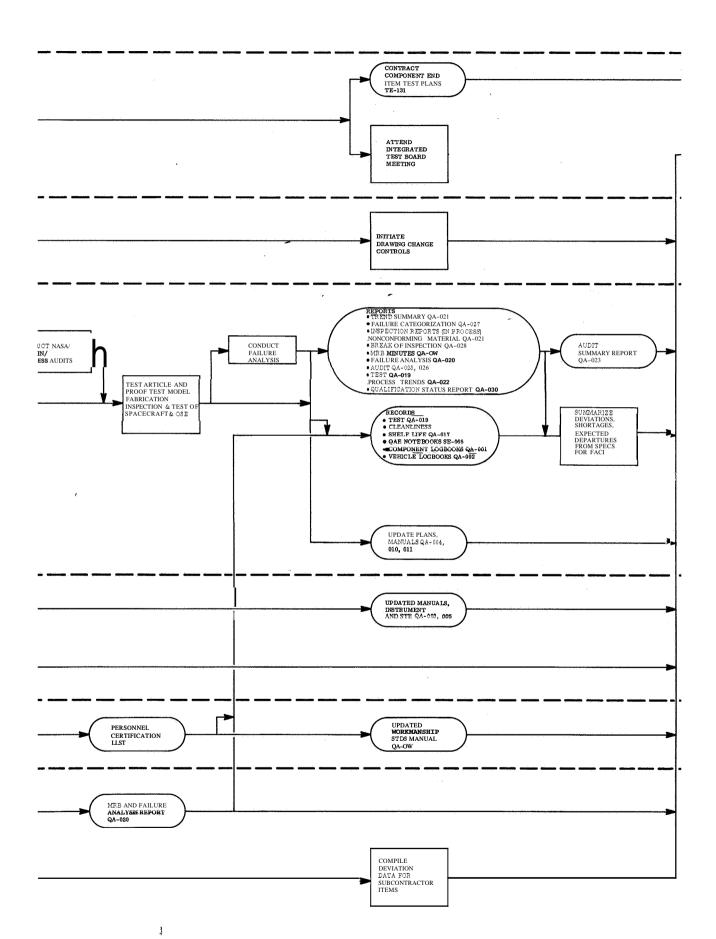


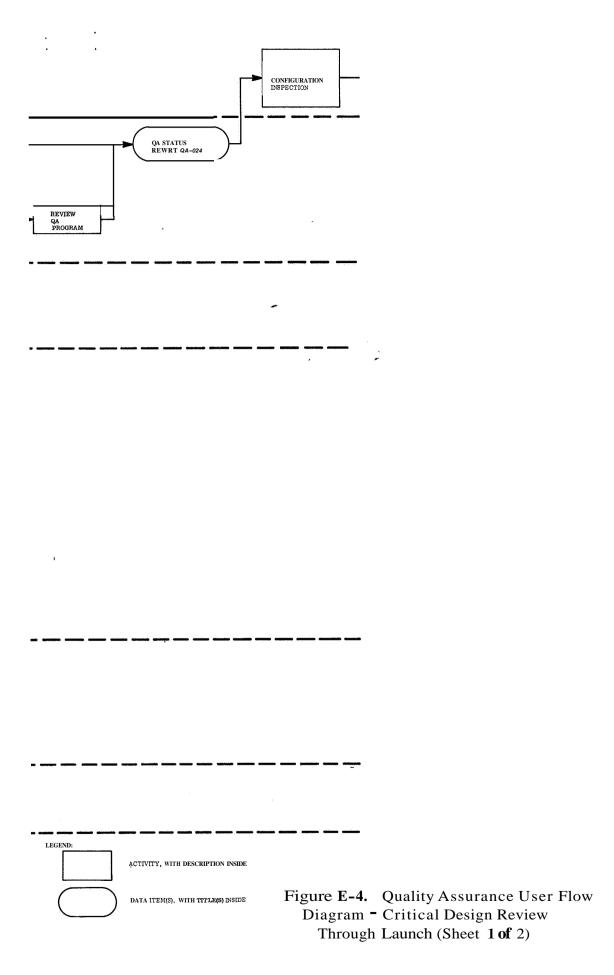


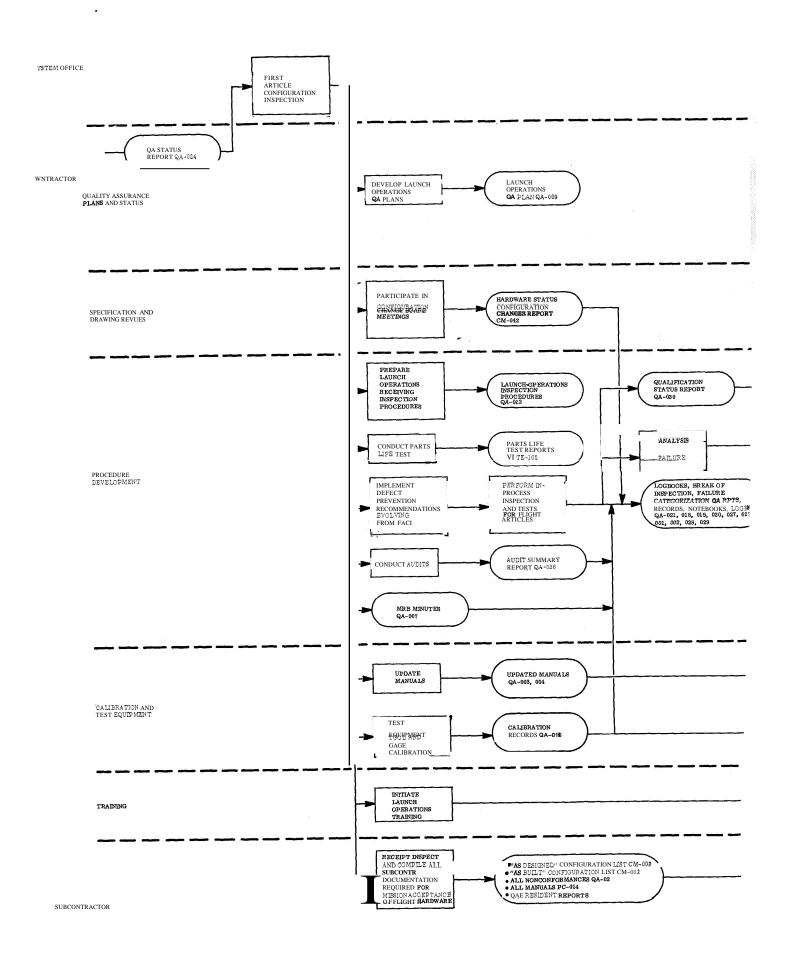


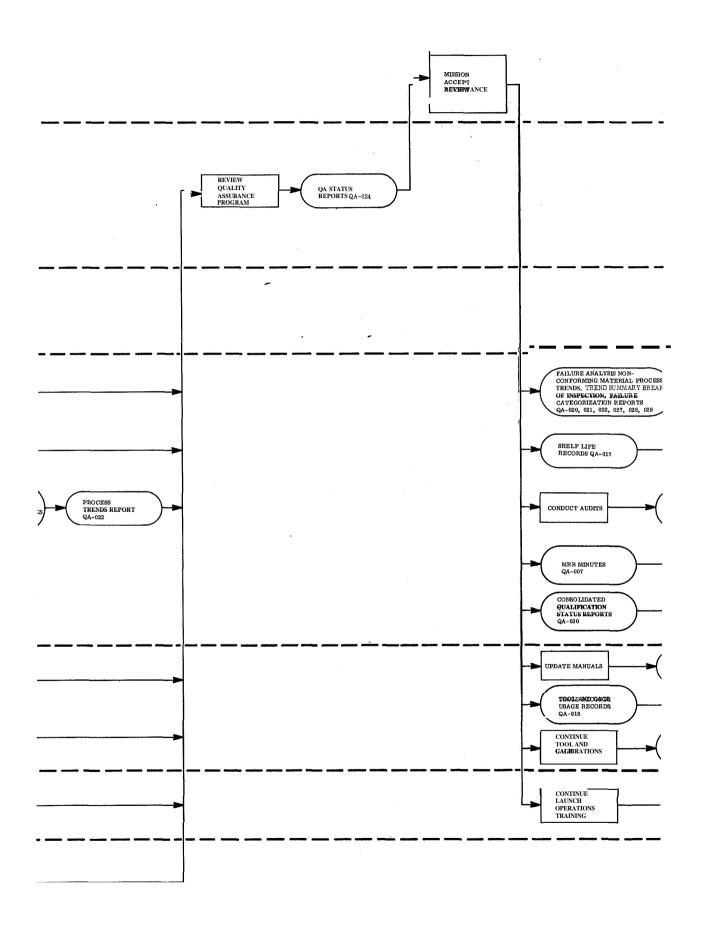


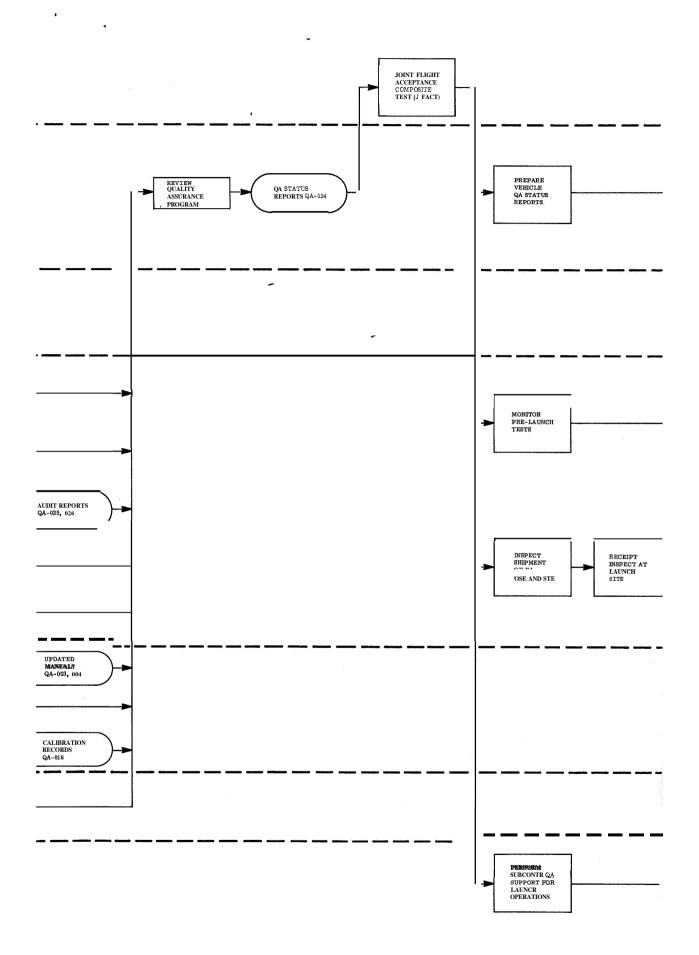
1



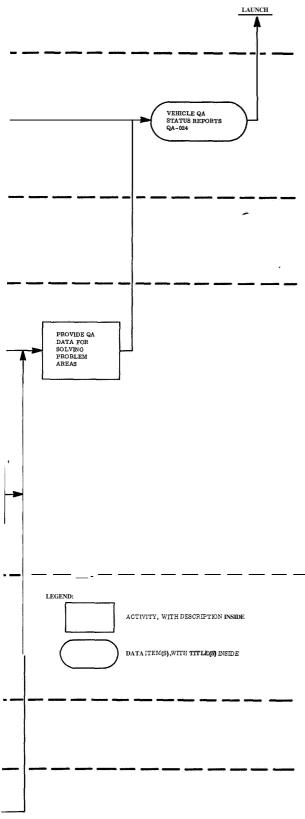








1



1

Figure E-4. QualityAssurance User Flow
Diagram - Critical Design Review
Through Launch (Sheet 2 of 2)

Quality Assurance Data Requirement Descriptions

DRD Number	<u>Title</u>
QA-001	Logbook, Component
QA-002	Logbook, 'Vehicle
QA-003	Manual, Instrument Calibration and Maintenance
QA-004	Manual, Quality Assurance Operating Procedures
QA-005	Manual, Special Test Equipment, Component
QA-006	Manual, Workmanship Standards
QA-007	Minutes, Material Review Board
QA-008	Plan, Inspection
QA-009	Plan, Quality Assurance Program
QA-010	Plan, Sampling
QA-011	Plan, Test and Operating, for Special Test Equipment (STE), Component
QA-012	Procedure, Process Control
QA-013	Procedure, Test/Inspection
QA-014	Procedure, Rework
QA-015	Procedure, Area Control
QA-016	Record, Calibration
QA-017	Record, Shelf Life
QA-018	Record, Tool and Gauge Usage
QA-019	Record, Test (Materials, Parts, Sub-Assemblies)
QA-020	*Report, Failure Analysis
QA-021	*Report Nonconforming Material (NCMR)
QA-022	*Report, Process Trends
QA-023	*Report, Quality Audit
QA-024	*Report, Quality Status
QA-025	Report, Special Measurement and Test Equipment Evaluation (Component)

^{*}Key Informal Data

3

DRD <u>Number</u>	<u>Title</u>
QA-026	Report, Quality Assurance Audit Summary
&A-027	Report, 'QualityTrend Summary
QA-028	Report, Break of Inspection
QA-029	*Report, Failure Categorization
&A-030	Report, Qualification Status
&A-031	Specification, Special Test Equipment (STE), Component

^{*}Key Informal Data

VOVACED DAT	A DECLIDEMENT DESCRIPTION			DRD APPROVED BY	, .	DATE:	DATA CATEGORY:
VUYAGER DAI/	A REQUIREMENT DESCRIPTION			1			
ORGANIZATION ORIGINATING CODE REQUIREMENT			DRD PREPA		DATE	CONTRACT NO.:	DRD NO.:
REOUIREMENT			T. Smyt	th 	7/28/67		QA-001
TITLE OF DOCUMENT.				FOR DOCUMENT P		TASK OR SUBTASK:	DRL ITEM NO.:
I OGDOOM GOLDON				Quality Assi	urance		
LOGBOOK, COMPON	NENT			ORGANIZATION RE		DRL NO.:	LEVEL NO.:
				FOR DOCUMENT RE	PRODUCTION		
				ORGANIZATION RE	SPONSIBLE	DDL NO.	FILE NO.
TYPE OF DOCUMENT: CONTROL			· · · · · · · · · · · · · · · · · · ·	FOR DOCUMENT DI	STRIBUTION:		
USE OF DOCUMENT: CONTROL	DACTION DREFERENCE	15 INFORMA	TION	ODCANIZATION DE	CDONCIDI E	NO OF	CODIES
To record chronological	historical data and	pertine	nt	ORGANIZATION RE FOR DOCUMENT			
information used in revi			- 1				<u> </u>
and solving anomalies an		-	n	ESTIMATED MA FOR SINGLE PRE			ON CUTOFF
meeting requirement and	d acceptance criteri	a.			,		
INTERDELATIONOLD MITTER CALLED CALL	A DECLIDEMENTS:	•		ESTIMATED CO	ST (\$)		ATA DUE
INTERRELATIONSHP WITH OTHER DAT CM-003, Change Notice QA-009, Plan, Quality A				FOR SINGLE PRE	FAKATIUN	то (JSER.
QA-009, Plan, Quality A QA-021, *Report, Nonc	Assurance Program	(NCMP)	,	FREOUENCY O	F ISSUE.	PUBLICAT	ION DATE
TE-027, *Logbook, Tes	t	(1 (CIVIII)	<i>'</i>	O ANNUALLY		HDR	
TE-061, *Logbook Cum	ulative Test Time			O SEMI-ANNUALI O QUARTERLY	_Y		REQUENCY
8: 400 IFICATION				O 81-MONTHLY MONTHLY	.,	OR MILE	STONE)
CLASS IFICATION: O SECRET	O GROUP I O GROUP 2	O SPECIAL F	HANDLING	O SEMI-MONTHL' O €31-WEEKLY	Y	Daily th	ru MAl
☐ CONFIDENTIAL O SECRET RESTRICTED DATA	O GROUP 4	O NASA DISC O JPL DISC	REET	O DAILY	CDECIEIED	ESTIN EXPIRATI	MATED ON DATE
O CONFIDENTIAL RESTRICTED DAT MATERIAL DESTRICTED DAT		O PROJECT I O NOFORN	DISCREET	1)for each (270 1107711	ON BATE
ORM OF DATA: 3 KIN	ND OF DATA.			REFERENCE DOCU			
M PRINTED DOCUMENT	O ABSTRACT	□ INSTRU	JCTION				
O CHART	☐ BROCHURE	O LETTER	₹				
☐ DIAGRAM	O BULLETIN	O LIST					
☐ DRAWING ☐ FILM (STATIC OR MOTION)	CATALOG O CONTRACT	MA LOG O MANUA	ΛI.				
O ILLUSTRATION	O DIRECTIVE	O MEMOR					
O MODEL	O DISCLOSURE	O MINUTE					
O RECORDING (TAPE OR DISC)	O ENGINEERING CHANGE	🗖 PLAN		APPLICABLE STAN	IDARDS		
O COMPUTER CARD	ORDER	O PROCEI	DURE				
O COMPUTER TAPE	O REQUEST FOR ENGINEER						
O MICROFILM (W/OR W/O CARD							
O OTHER	O ENGINEERING CHANGE PROPOSAL	O SPECIF					
	O HANDBOOK	O STANDA					
	O INDEX	O VOUCHE	ĒR				
REVIEWS AND/OR APPROVALS REQU	JIRED:						
(LIST IN ORDER OF SUBMITTAL)		D.4.T.F		DDEDUDU (OATIO)	DD005	_	
	DRAFT	DATE		PREPUBLICATION	PKOOF	D	ATE
SUBMIT FOR REVIEW TO:							
	ВУ		_			ВҮ	
			_				
			_				
SUBMIT FOR			_				
APPROVAL TO	BY _					ВҮ	
Manager,	Quality Assurance_		- –				

VOYAGER DATA REQUIREMENT DESCRIPTION - 2ND SHEET	
SPECIAL INSTRUCTIONS:	DRD NO.:
A DRD at the subcontractor/vendor level similar in content to this DRD is required.	QA-00
•	
SPECIAL OISTRIBUTION' (IF DISTRIBUTION IS NOT COVERED BY AN EXISTING DDL WRITE IN DISTRIBUTION BELOW)	

OUTLINE OF CONTENTS:

- 1. Component Logbook is a chronological, historical record of component activity starting with the first functional test.
- 2. Each Component Logbook is serialized and is assigned to a specific piece of hardware identified by a lot number or serial number.
- 3. The cognizant engineer identifies the various parameters to be recorded in the logbook.
 - a. Number of mate and demating of connectors.
 - b. Number of hours power was applied to the component.
 - c. Number of operating test cycles of the component.
 - d. Number of out-of-specification readings (failures) troubleshooting procedure, assignable for the out-of-specification reading and how the correction was accomplished. This is in addition to **MRB** documentation.
 - e. Any abnormal occurrence, no matter how insignificant, is recorded.
- 4. References break of inspection record and nonconforming material record.
- 5. References the failures and failure analysis reports.
- 6. Identifies component configuration.

,				DRD APPROVED	BY:	DATE:	CATEGORY:
VOYAGER DAT	A REQUIREMENT DESCRIPTION					,	CALEGORY.
ORGANIZATION ORIGINATING CODE	OFFICE RESPONSIBLE FOR DE	ODE	DRD PREPA	ARED BY:	DATE'	CONTRACT	DRD NO.:
REQUIREMENT. QA	LI OTTICE RESIGNABLE FOR DE	W. CODE	T. Sm		17/28/67 7	NO.:	QA-002
TITLE OF DOCUMENT:	<u> </u>		1. 511	DRGANIZATION	17/20/07	TASK OR	DRL ITEM
THEE OF DOCUMENT.				DOCUMENT	PREPARATION:	SUBTASK:	NO.:
LOGBOOK, VEHIC	LE			Quality As	surance		
				ORGANIZATION FOR DOCUMENT		DRL NO.:	LEVEL NO.:
				ON BOCOMENT	THE THOUSANDIE.		
				ORGANI Z ATION	RESPONSIBLE	DDL NO.:	FILE NO.:
		, , , , , , , , , , , , , , , , , , , 	·	FOR DOCUMENT			
TYPE OF DOCUMENT: CONTROL	DACTION DREFERENCE	M INFORM	MATION				
USE OF DOCUMENT:				FOR DOCUME	NT STOWAGE	NO OF	COPIES:
To verify by a document	_	-				10)
historical and chronolog	•	ts of th	ne	ESTIMATED	MANHOURS	INFORMAT	ON CUTOFF
vehicle presented for bu	y off.			FOR SINGLE P		DATE OR I	MILESTONE:
			,				
INTERRELATIONSHIP WITH OTHER DA	TA REQUIREMENTS:			ESTIMATED FOR SINGLE P		•	ATA DUE JSER:
INTERRELATIONSHIP WITH OTHER DA (CM-005, Index, Contrac	et End Item Approved	l Confi	guration			10 0	OLIV.
CM-010, List, Hardwar CA-001, Logbook, Com		ges		FREQUENCY	OF ISSUE:	PUBLICAT	ION DATE:
(?A-001, Logoook, Collige)				☐ ANNUALLY		HDF	
(?A-021, *Report, Nonc		NCMR	.)	SEMI-ANNU QUARTERLY		11101	
IRA-006, Log, Problem			,	☐ EI-MONTHL\		UPD R MILE	STONE!
CLASSIFICATION:	□ GROUP I			SEMI-MONT DEI-WEEKLY	HLY	As requi	red
SECRET CONFIDENTIAL	☐ GROUP 3 ☐	SPECIAL NASA DI	HANDLING SCREET	☐ WEEKLY			ALEU
☐ SECRET RESTRICTED DATA ☐ CONFIDENTIAL RESTRICTED DA		JPL DIS PROJECT	CREET DISCREET	KI OTHERWISE	AS SPECIFIED		ON DATE:
☑ UNCLASSIFIED		NOFORN		As requ	ired		
FORM OF DATA: KI	ND OF DATA.			REFERENCE DO	CUMENTS:		
☐ PRINTED DOCUMENT	☐ ABSTRACT	□ INSTE					
CHART	□ BROCHURE	C LETTI	≣R				
☐ DIAGRAM ☐ DRAWING	☐ BULLETIN ☐ CATALOG	LIST LOG					
☐ FILM (STATIC OR MOTION)	☐ CONTRACT	☐ MANU	JAL				
☐ ILLUSTRATION	☐ DIRECTIVE	□ мемо	RANDUM				
□ MODEL	☐ DISCLOSURE	☐ MINU	-				<u> </u>
RECORDING (TAPE OR DISC)		☐ PLAN		APPLICABLE ST	TANDARDS.		
☐ COMPUTER CARD ☐ COMPUTER TAPE	ORDER REQUEST FOR ENGINEER-	□ PROC	i				
☐ MICROFILM (W/OR W/O CARE	_						
☐ OTHER	ENGINEERING CHANGE	SCHE	DULE				
	PROPOSAL		IFICATION				
	☐ HANDBOOK	STAN					
	□ INDEX	□ vouc	nck .		······································		:
REVIEWS AND/OR APPROVALS REC	UIRED:						
(LIST IN ORDER OF SUBMITTAL)	DRAFT	DATE		PREPUBLICATIO	N PROOF	ח	ATE
		··· -		2010		2.	
SUBMIT FOR REVIEW TO:				the state of the s	· · · · · · · · · · · · · · · · · · ·		
	· · · · · · · · · · · · · · · · · · ·						
	BY					BY	- · ·
			_				
						-	
				······································			
SUBMIT FOR APPROVAL TO	BY	· · · · · · · · · · · · · · · · · · ·				ВҮ	 .
	uality Assurance	•					,
						•	

VOYAGER DATA REQUIREMENT DESCRIPTION - 2ND SHEET				
Logbooks may be any number of volumes dependent upon events (number of BOI's etc.) occuring during vehicle processing. Since the books are a completion of numerous types of data items, they will be in notebook form with appropriate covers.	QA-00;			
SPECIAL DISTRIBUTION (IF DISTRIBUTION IS NOT COVERED BY AN EXISTING DDL WRITE IN DISTRIBUTION BELOW)				
1				
OUTLINE OF CONTENTS:				
 Lists all components by serial number, drawing and revision number, and verifies acceptance buy off. Verifies inspection buy off during assembly. List of all nonconforming material reports written during assembly and test and ve acceptance buy off. 				
A Lists all MDD actions and dispositions				

- 4. Lists all **MRB** actions and dispositions.
- 5. Lists all tests and results and verifies acceptance.
- **6.** Records power on time, cycle times, mating and demating **of** connectors, etc. All pertinent actions as performed on the vehicle during assembly and test.
- 7. Records all break of inspection events.
- 8. Record of compliance to the latest configuration.

1				DRD APPROVED BY	/ :	DATE:	DATA CATEGORY:
VOYAGER DATA	REQUIREMENT DESCRIPTION						CATEGORY.
ORGANIZATION ORIGINATING CODE:	OFFICE RESPONSIBLE FOR DRI	D. CODE.	DRD PREPA	ARED BY:	DATE:	CONTRACT	DRD NO.:
REQUIREMENT: QA	OF FICE TREST GREATER TOTAL BIRE	0.000	T. Smy		7/28/67	NO.	QA-003
 			1 . Diny	ORGANIZATION RE	<u> </u>	TASK OR	DRL ITEM
TITLE OF DOCUMENT'				OR DOCUMENT P		SUBTASK:	NO.:
 MANUAL INSTRUMENT	CALIDDATION AND			Quality Ass	surance		
MAINTENANCE	CALIBRATION AIND	•		ORGANIZATION RE		DRL NO.:	LEVEL NO.:
MAINTENANCE				FOR DOCUMENT RE	PRODUCTION:		
							
				ORGANIZATION RE		DDL NO.:	FILE NO.
TYPE OF DOCUMENT: CONTROL	DACTION PREFERENCE [] INFORM	MATION	1			
USE OF DOCUMENT: Provide a s				ORGANIZATION R	ESPONSIBLE	NO. OF	COPIES:
procedures for performing				FOR DOCUMENT	STOWAGE.	5	
maintenance of test and n	•						
controlled procedures ma				ESTIMATED MA FOR SINGLE PRE		_	ON CUTOFF
:€orreliability and confide				FOR SINGLE PRE	PARATION	DATE OR I	WILESTOINE
data.	once in the inspection	ii aiia	COSC	FOTIMATED CO	OCT (Å)	DATE D	ATA DUE
INTERRELATIONSHIP WITH OTHER DATA	REQUIREMENTS:			ESTIMATED CO FOR SINGLE PRE			JSER.
&A-009, Plan, Quality A	ssurance Program			FREQUENCY O	F ISSUE:	PUBLICAT	ION DATE:
	ssurunce i rogram			☐ ANNUALLY		S	DR
				SEMI-ANNUAL QUARTERLY	.LY		
				81-MONTHLY MONTHLY		OR MILE	REQUENCY ESTONE):
CLASS IFICATION:	☐ GROUP I			SEMI-MONTHL 81-WEEKLY	Υ	Maintair	n cur-
☐ SECRET ☐ CONFIDENTIAL	☐ GROUP 3 ☐	NASA DIS		□ WEEKLY □ DAILY		rent thr	MATED
☐ SECRET RESTRICTED DATA ☐ CONFIDENTIAL RESTRICTED DATA	□ PROPRIETARY □	JPL DIS PROJECT	CREET DISCREET	TO OTHERWISE, AS		EXPIRATI	ON DATE:
₫ UNCLASSIFIED	☐ PUBLIC DOMAIN ☐	NOFORN	 	Maintain Cu	rrent		
FORM OF DATA: KINE	O OF DATA:			REFERENCE DOCL	JMENTS:		
X PRINTED DOCUMENT	☐ ABSTRACT	□ INSTR		MIII C 4	-cco	1.1	
☐ CHART	□ BROCHURE	C LETTE	ER .	MIL-C-45			1
☐ DIAGRAM ☐ DRAWING	☐ BULLETIN☐ CATALOG	□ LOG		System R	equireme	ents	
☐ FILM (STATIC OR MOTION)	□ CONTRACT	□ MANU	JAL				
☐ ILLUSTRATION	☐ DIRECTIVE	_	RANDUM				
□ MODEL	☐ DISCLOSURE	□ MINU	TES				3
RECORDING (TAPE OR DISC)	☐ ENGINEERING CHANGE	□ PLAN		APPLICABLE STAN	NDARDS:		
COMPUTER CARD	ORDER	X PROC					
COMPUTER TAPE MICROFILM (W/OR W/O CARD)	REQUEST FOR ENGINEER- ING CHANGE PROPOSAL						
OTHER		SCHE					
	PROPOSAL	□ SPEC	IFICATION				
	☐ HANDBOOK	☐ STANI	DARD				
-	□ INDEX	□ VOUCE	HER				
REVIEWS AND/OR APPROVALS REQUI	REĎ:	 	· · · · · · · · · · · · · · · · · ·				·/· / · · · · · · · · · · · · · · · · ·
(LIST IN ORDER OF SUBMITTAL)							
[DRAFT	DATE		PREPUBLICATION	PROOF	D.	ATE
SUBMIT FOR REVIEW TO:							
						ВҮ ——	
						-	
. —							
/ 							
SUBMIT FOR	- DV						
APPROVAL TO	BY					ВҮ	
Manager.	Quality Assurance						

GE EXHIBIT DRD QA-003						
VOYAGER DATA REQUIREMENT DESCRIPTION - 2ND SHEET						
SPECIAL INSTRUCTIONS'						
QA-00						
Calibration and maintenance procedures for equipment used in tests are published by the equipment engineer. Calibration cycles are based on manufacturer's recommendations and from established historical records on the equipment. A DRD at the subcontractor/vendor level similar in content to this DRD is required.						
SPECIAL DISTRIBUTION. (IF DISTRIBUTION IS NOT COVERED BY AN EXISTING ODL WRITE IN DISTRIBUTION BELOW)						
 Type of Equipment, by Manufacturer. A brief description of the equipment. Equipment accuracy limits and ranges. Maintenance procedure as recommended by the manufacturers and supplemented by the equipment engineer. Calibration procedure for the technician utilizing secondary standards traceable to the Bureau of Standards. 						
6. Description of the method of documenting the calibration and maintenance performed.						
o. Description a the method of documenting the current and maintenance performed.						

VOYAGER DATA REQUIREMENT DESCRIPTION			DRD APPROVED I	BY:	DATE	DATA CATEGORY:
					00/	DRD NO."
DECLIDEMENT	OFFICE RESPONSIBLE FOR DRD:	1 1	EPARED BY:	DATE'	CONTRACT NO.:	
QA		T. Sn		7/28/67		QA-004
TITLE OF DOCUMENT:			ORGANIZATION F FOR DOCUMENT		TASK OR SUBTASK	DRL ITEM NO.
			Quality As:		CODIAGN	INO.
MANUAL, QUALITY ASS				 		LEVEL NO
OPERATING PROCEDUR	ES		ORGANIZATION I FOR DOCUMENT I		DRL NO	LEVEL NO.:
			Description			
			ORGANI Z ATION		DDL NO.:	FILE NO:
TYPE OF DOCUMENT: O CONTROL	MACTICAL PROPERTY.		FOR DOCUMENT	DISTRIBUTION.		
USE OF DOCUMENT. O CONTROL	DACTION PREFERENCE O	INFORMATION	ORGANIZATION	DECDONCIDI F	NO OF	CORIES
	1 'C'		FOR DOCUMEN			
To meet the historical and	_	<u></u>			30)
requirements with establi		ement	ESTIMATED			ION CUTOFF
Quality Assurance Proced	lures		FOR SINGLE PF		DATE OR	MILESTONE.:
					<u> </u>	· · · · · · · · · · · · · · · · · · ·
INTERRELATIONSHIP WITH OTHER DATA	REQUIREMENTS:	······································	ESTIMATED (FOR SINGLE PR		8	ATA DUE JSER:
			. S. C. SINGLE III			JULIN.
QA-009, Plan, Quality As	<u> </u>	. (D)	FREQUENCY	OF ISSUE:	PUBLICAT	ION DATE:
QA-021, Report, Noncon	torming Material (NC	MR)	O ANNUALLY			
			SEMI-ANNUA O QUARTERLY	ALLY	SDR	
			☐ EI-MONTHLY			REQUENCY
CLASSIFICATION:	O GROUP I	· · · · · · · · · · · · · · · · · · ·	☐ SEMI-MONTH	ILY	Monthl	
☐ SECRET ☐ CONFIDENTIAL	O GROUP 2	PECIAL HANDLING ASA DISCREET	LJ WEEKLY		laur	nch MATED
SECRET RESTRICTED DATA O CONFIDENTIAL RESTRICTED DATA	O GROUP 4 O J	PL DISCREET	D DAILY OTHERWISE,	A\$ SPECIFIED	EXPIRATI	
X UNCLASSIFIED		ROJECT DISCREET OFORN	Maintain c			
FORM OF DATA: KINI	D OF DATA.		REFERENCE DO			
ST PRINTED DOCUMENT		INSTRUCTION	Military S ₁	-		
O CHART) LETTER	Configurati	_	gement (d	PL)
☐ DIAGRAM		LIST	NPC 200-2	,		
□ DRAWING		υœ	NPC 200-3	3		
☐ FILM (STATIC OR MOTION)		MANUAL MEMORANDUM				
☐ ILLUSTRATION ☐ MODEL		MEMORANDUM MINUTES				
O RECORDING (TAPE OR DISC)		PLAN	APPLICABLE ST	ANDARDS.		
O COMPUTER CARD	ORDER E	PROCEDURE				
☐ COMPUTER TAPE	O REQUEST FOR ENGINEER-	REGULATION				
☐ MICROFILM (W/OR W/O CARD)						
O OTHER		SCHEDULE				
) SPECIFICATION) STANDARD				
) VOUCHER				
REVIEWS AND/OR APPROVALS REQUI	RED:					
,	DRAFT [DATE	PREPUBLICATION	N PROOF	D	ATE
SUBMIT FOR REVIEW TO:						
<u></u>			-			
	BY				′B Y	
		<u> </u>				
SUBMIT FOR APPROVAL TO	BY				ВҮ	
	Quality Assurance		-			
I Triumager, V	and					

PAGE IOF 2

JPL 2568 OCT 6

VOYAGER DATA REQUIREMENT DESCRIPTION - 2ND SHEET					
SPECIAL INSTRUCTIONS: QA -0					
Procedures incorporate specific customer, and established quality requirements as governed by NASA and Military documents.					
SPECIAL DISTRIBUTION. (IF DISTRIBUTION IS NOT COVERED BY AN EXISTING ODL WRITE IN DISTRIBUTION BELOW)					
 Defines the purpose and scope of the operating procedure. Assigns specific responsibilities for implementation and control of the procedure. Defines method of implementation by manufacturing. Defines method of measurement and audit requirements. Defines the documentation required to meet the procedure/requirements. 					
Example: Processing of Nonconformance Material Report through the Material Review Board	d.				

			DRO APPROVED E	BY:	DATE:	DATA CATEGORY:
VOYAGER DATA	REQUIREMENT DESCRIPTION					
ORGANIZATION ORIGINATING CODE:	OFFICE RESPONSIBLE FOR DRD	CODE: DRD PREP	ARED BY:	DATE:	CONTRACT	DRD NO
REQUIREMENT: QA		T.F. S	$\mathbf{m}^{\mathrm{yth}}$	7/28/67	NO.:	QA-005
TITLE OF DOCUMENT:			ORGANIZATION R		TASK OR	DRL ITEM
TITLE OF BOOOMENT.			FOR DOCUMENT		SUBTASK:	NO.:
MANUAL, SPECIAL TES	T EOUIPMENT. COM	MPONENT	Quality As	surance		
,	,		ORGANIZATION F		DRL NO.:	LEVEL NO.:
			VOIC BOOMERT			
	•		ORGANIZATION F	RESPONSIBLE	DDL NO.:	FILE NO.
the state of the s			FOR DOCUMENT	DISTRIBUTION		
	DACTION MEREFERENCE D	INFORMATION			NO OF	CODIES
USE OF DOCUMENT:	6.1		ORGANIZATION FOR DOCUMEN			_
To control the configurati	-		TOK BOOOMEN	1 OTOWNOL.	10	0
consistent with changes n	•		ESTIMATED I	MANHOURS	INFORMAT	ION CUTOFF
formance requirements a		eration	FOR SINGLE PR		DATE OR I	MILESTONE:
manual for special test e	quipment.		· -			
INTERRELATIONSHIP WITH OTHER DATA	REQUIREMENTS'		ESTIMATED (FOR SINGLE PR		8	ATA DUE JSER:
MIERRELATIONSMIP WITH CITIEN DATA	NECOMEMENTO.		TOR OMOLL TO	(217110111011	10 (JOEIN.
CM-003, Change Notice			FREQUENCY	OF ISSUE:	PUBLICAT	ION DATE:
QA-009, Plan, Quality A	ssurance Program		O ANNUALLY		PI	
TE-030, Procedure, Tes	t Operating		SEMI-ANNUA QUARTERLY	LLY		
			O EI-MONTHLY MONTHLY			REQUENCY STONE):
CLASSIFICATION:	O GROUP I		O SEMI-MONTH	ILY	Monthly	thru
O SECRET O CONFIDENTIAL	☐ GROUP 3 O 1	SPECIAL HANDLING NASA DISCREET	O DAILY		FAC ESTIN	I MATED
SECRET RESTRICTED DATA CONFIDENTIAL RESTRICTED DATA		IPL DISCREET PROJECT DISCREET	TO DAILT	AS SPECIFIED	EXPIRATI	ON DATE:
M UNCLASSIFIED		NOFORN	Maintain c	urrent		
FORM OF DATA: KIN	D OF DATA:		REFERENCE DOO	CUMENTS:		
🛛 PRINTED DOCUMENT	☐ ABSTRACT	INSTRUCTION				
CHART		LETTER				
☐ DIAGRAM ☐ DRAWING		□ LIST □ LOG				
O FILM (STATIC OR MDTION)		X MANUAL				
☐ ILLUSTRATION	☐ DIRECTIVE	☐ MEMORANDUM				
O MODEL	□ DISCLDSURE	☐ MINUTES		,		
O RECORDING (TAPE OR DISC)		D PLAN	APPLICABLE ST	ANDARDS		
COMPUTER CARD COMPUTER TAPE	ORDER ORDER	PROCEDURE				
☐ MICROFILM (W/OR W/O CARD)						
□ OTHER		SCHEDULE				
		SPECIFICATION				
		STANDARD				
	□ INDEX	□ VOUCHER				
REVIEWS AND/OR APPROVALS REQU	IRED:					
(LIST IN ORDER DF SUBMITTAL)	DRAFT	DATE	PREPUBLICATION	N PROOF	D	ATE
SUBMIT FOR REVIEW TO:						
	EY				, BY	
		<u> </u>				
SUBMIT FOR APPROVAL TO	ВУ				ВҮ	
	Quality Assurance					

JPL 2568 OCT €

•						
VOYAGER DATA REQUIREMENT DESCRIPTION - 2ND SHEET						
SPECIAL INSTRUCTIONS:	QA-00					
Quality Assurance Engineer is responsible for maintaining the manual current with the design and performance requirements and changes.	422 00					
, and the second						
SPECIAL DISTRIBUTION (IF DISTRIBUTION IS NOT COVERED BY AN EXISTING DDL WRITE IN DISTRIBUTION BELOW)						
OUTLINE OF CONTENTS:						

- 1. Manual describes the test equipment by drawing number and alteration notice and covers its test capabilities as related to a specific piece of hardware.
- 2. A complete set of print control drawings are a part of the manual.
- **3.** Each modification to test equipment is authorized by a print control drawing and the manual is updated.
- 4. Changes in operating procedures are made at each revision, and manual is maintained current.
- 5. Special precautions for operation are detailed in manual.
- **6.** Equipment troubleshooting procedures are detailed.
- 7. Checkoff lists are detailed for operating equipment.
- 8. Defines the limitation of the equipment.
- 9. Calibration and maintenance cycles.

VOYA	GER DATA F	REQUIREMENT DESCRIPTION			DRD APPROVED BY	· · · · · · · · · · · · · · · · · · ·	DATE:	DATA CATEGORY:
ORGANIZATION ORIGINATING	CODE	OFFICE RESPONSIBLE FOR (DBD, CODE	DRD PREPA	ARED BY:	DATE.	CONTRACT	DRD NO.:
REOUIREMENT	QA	5.1.62 N.26. 5.16.522 1 5 .11		T. Smy		7/28/67	NO.:	QA-006
	QI.			1. SIII)		1		
TITLE OF DOCUMENT:					ORGANIZATION RE		TASK OR SUBTASK:	DRL ITEM NO.:
					Quality Ass			
MANUAL, WORK	MANSH	IP STANDARDS			, , , , , , , , , , , , , , , , , , , 	<u> </u>		
					ORGANIZATION RE		DRL NO.:	LEVEL NO.:
					VOIT BOOOMENT THE	I ROBOOTIOI		
					DRGANIZATION RI		DDL NO.:	FILE NO.:
TYPE OF DOCUMENT:	ONTROL	OACTION MOREPHAR	OWEODA	(ATION)	4 OK BOOOMENT B	IOTRIBOTION.		
	ONTROL (OACTION REFERENCE	OINFORM	MALION	ODGANIZATION D	EODONOIDI E	NO OF	CODIEC
USE OF DOCUMENT:					ORGANIZATION R FOR DOCUMENT		NO OF	COPIES:
To provide visual	aids for	r operators and in	spector	28.25	1		10	
i ~		-	-	s as		ANII 101 ID 0	INICODMAT	ION CUTOFF
acceptance criteri	a for ap	pplicable processes	S.		ESTIMATED M FOR SINGLE PRE			MILESTONE:
					COTIMATED OF	20T / 6\	DATE D	ATA DUE
INTERRELATIONSHIP WITH O	THER DATA	REQUIREMENTS:			ESTIMATED CO FOR SINGLE PRE		•	JSER:
						-		
O 4 000 Pl O	1°. A	ъ			FREQUENCY O	OF TOOLIE		
QA-009, Plan, Qu	iality A	ssurance Program	1			DF 1880E:	PUBLICAT	ION DATE:
					☐ ANNUALLY ☐ SEMI-ANNUAL	ΙΥ		
					☐ QUARTERLY	<u>-</u> 1	LIDDATE /	REOUENCY
					B 81-MONTHLY MONTHLY			
CLASSIFICATION:		O GROUP I	•		☐ SEMI-MONTHL	Υ.	Monthly	
☐ SECRET ☐ CONFIDENTIAL		O GROUP 2 GROUP 3	☐ SPECIAL O NASA DI	HANDLING	O WEEKLY		FA	MATED
SECRET RESTRICTED D.		O GROUP 4	O JPL DIS	CREET	O DAILY ST OTHERWISE, A	\$ SPECIFIED		ON DATE:
O CONFIDENTIAL RESTR MUNCLASSIFIED	CTED DATA	O PROPRIETARY O PUBLIC DOMAIN	O PROJECT O NOFORN	Γ DISCREET	Maintain cu			
23 ONOLAGOII ILD		7	0		 		<u> </u>	· · · · · · · · · · · · · · · · · · ·
FORM OF DATA:	KIND	OF DATA.			REFERENCE DOCU	JMENTS:		
EX PRINTED DOCUME	NT	□ ABSTRACT	☐ INST	RUCTION	NDC 200	4		
O CHART		O BROCHURE	O LETT	ER	NPC - 200-	-4		
O DIAGRAM		O BULLETIN	☐ LIST					
☐ DRAWING		O CATALOG	LOG					
O FILM (STATIC OR N	IOTION)	O CONTRACT	ঐ MAN					
O ILLUSTRATION		O DIRECTIVE		ORANDUM				
□ MODEL		O DISCLOSURE	O MINU		ADDITION DE CTA	NDADDO	<u> </u>	
☐ RECORDING (TAPE	OR DISC)	O ENGINEERING CHANGE	☐ PLAN		APPLICABLE STA	NDARDS.		
O COMPUTER CARD		ORDER	O PRO					
O COMPUTER TAPE		☐ REOUEST FOR ENGINEE						
☐ MICROFILM (₩/OR	W/O CARD)	ING CHANGE PROPOSA	_					
O OTHER		O ENGINEERING CHANGE						i
		PROPOSAL		IFICATION				
		O HANDBOOK	O STAN					
<u> </u>		O INDEX	O VOUC	HEK				
REVIEWS AND/OR APPROV	ALS RECLU	RFD:	· · · · ·	<u> </u>	######################################			
(LIST IN DROER OF SUBMI								
		DRAFT	DATE		PREPUBLICATION	PROOF	D	ATE
SUBMIT FOR REVIEW TO'								

1		ВҮ					ВҮ	•
_		•		_				· · · · · · · · · · · · · · · · · · ·
<u> </u>	· · · ·			-	a ing katang pantang katan			· · · · · · · · · · · · · · · ·
ľ							****	 :
SUBMIT FOR APPROVAL TO		ВҮ					a Y	
1	anagar	Mahufacturing					***************************************	,
<u>IV</u>	ianager,	manuracturing						

PAGE IOF 2

VOYAGER DATA REQUIREMENT DESCRIPTION - 2ND SHEET	
SPECIAL INSTRUCTIONS	DRD NO.: QA-00
Samples of workmanship are closely coordinated and compatible with the operator/inspector training school for certification. Photographs or work samples must be jointly selected with the customer. A DRD at the subcontractor/vendor level similar in content to this DRD is required.	ly
SPECIAL DISTRIBUTION (IF DISTRIBUTION IS NOT COVERED BY AN EXISTING DDL WRITE IN_DISTRIBUTION BELOW)	
OUTLINE OF CONTENTS:	
 The manual defines the categories of acceptance and rejection with samples of work photographs defining, accept, minimum acceptable, and reject. Defines the limitations on rework (e.g. number of splices). Recommends approved inspection procedure (e.g. magnification power). Establishes the most significant criteria of inspection. 	COT

JPL 2568-1 OCT 65

VOYAGER DATA	A REQUIREMENT DESCRIPTION		D	ORD APPROVED	ВУ	DATE:	DATA CATEGORY:
					· · · · · · · · · · · · · · · · · · ·		
ORGANIZATION ORIGINATING CODE. QA	OFFICE RESPONSIBLE FOR [1 1	PREPARE Smy		DATE 7/28/67	CONTRACT NO.:	DRD NO.: QA – 007
TITLE OF DOCUMENT:						TASK OR	DRL ITEM
				OR DOC MEN		SUBTASK:	NO.;
MINUTES, MATERIAL F	REVIEW BOARD		<u> </u>	Quality As			<u> </u>
·				ORGANIZATION OR DOCUMENT	RESPONSIBLE REPRODUCTION:	DRL NO.:	LEVEL NO.
	,			PRGANIZ ATION		DDL NO.:	FILE NO.:
TYPE OF DOCUMENT: CONTROL	CALCALON COSCOLATION	T NEOD ATON		OR DOCUMENT	DISTRIBUTION:		
USE OF DOCUMENT. CONTROL	DACTION DREFERENCE	X INFORMATION		20041117471011	DEODONOIDI E	NO OF	000150
USE OF DOCUMENT.				ORGANIZATION FOR DOCUME			COPIES:
To manage the status of h	andruana vyhiah ia ma	m a a m famma i m a	_			10)
To report the status of h	ardware which is no	oucomor.ming	_	ESTIMATED	MANHOURS	INFORMAT	ION CUTDFF
			F	OR SINGLE P	REPARATION'	DATE OR	MILESTONE:
INTERRELATIONSHIP WITH OTHER DAT	A REQUIREMENTS:			ESTIMATED OR SINGLE P			ATA DUÉ USER:
CM-016, List, Deviation						10	OOLIK.
QA-009, Plan, Quality A				FREQUENCY	OF ISSUE:	PUBLICAT	ION DATE:
QA-021, Report, Noncor	•	,		O ANNUALLY			
RA-007, *Minutes, Failu	ıre Analysis Review	Board (FAR	RB)	O SEMI-ANNU. O QUARTERLY	ALLY	SDR	
SE-057, Drawings (Cates	gory B) for Interface	e Control	1 (O EI-MONTHLY O MONTHLY	•		FREQUENCY
CLASSIFICATION:	O GROUP I			SEMI-MONTH	HLY	Weekly	thru
O SECRET CONFIDENTIAL		O SPECIAL HANDLI NASA DISCREET	1 4	81-WEEKLY WEEKLY		laune	MATED
O SECRET RESTRICTED DATA O CONFIDENTIAL RESTRICTED DAT	O GROUP 4	O JPL DISCREET O PROJECT DISCRE		□ DAILY O OTHERWISE,	AS SPECIFIED	-	ON DATE
☑ UNCLASSIFIED		O NOFORN					
FORM OF DATA: KIN	IO OF DATA:			EFERENCE DO			
A PRINTED DOCUMENT	O ABSTRACT	☐ INSTRUCTION	ıll	NASA Spe	cifications		
O CHART	O BROCHURE	O LETTER					
O DIAGRAM	O BULLETIN	O LIST					
O DRAWING O FILM (STATIC OR MOTION)	O CATALOG O CONTRACT	O LOG O MANUAL					
O ILLUSTRATION	O DIRECTIVE	☐ MEMORANDUM	и				
O MODEL	O DISCLOSURE	☐ MINUTES					
O RECORDING (TAPE OR DISC)	O ENGINEERING CHANGE	☐ PLAN	А	PPLICABLE ST	ANDARDS:		
O COMPUTER CARD	ORDER	O PROCEDURE	1				
O COMPUTER TAPE	O REOUEST FOR ENGINEER						
O MICROFILM (W/OR W/O CARD) O OTHER) ING CHANGE PROPOSA O ENGINEERING CHANGE						
O OTTLER	PROPOSAL PROPOSAL	□ SPECIFICATIO	ON				
	O HANDBOOK	O STANDARD					
	O INDEX	□ VOUCHER					
DEVIEWS AND/OR ADDROVALS DEGL	IIDED.						
REVIEWS AND/OR APPROVALS REQUIRED (LIST IN ORDER OF SUBMITTAL)	JIKED:						
	DRAFT	DATE	PR	EPUBLICATION	N PROOF	D	ATE
ļ							
SUBMIT FOR REVIEW TO: -	-						
	BY _					,в ү	
SUBMIT FOR							
APPROVAL TO	BY					BY	
<u>Manage</u>	r , Quality Assuranc	e <u> </u>					

¥-1-2	
VOYAGER DATA REQUIREMENT DESCRIPTION - 2ND SHEET	<u> </u>
SPECIAL INSTRUCTIONS:	DRD NO.:
A DRD at the subcontractor/vendor level similar in content to this DRD is required.	QA-007
Contents (see below) shall be coded for inclusion in data system facilitating computorizing data.	
SPECIAL DISTRIBUTION. (IF DISTRIBUTION IS NOT COVERED BY AN EXISTING DDL WRITE IN DISTRIBUTION BELOW)	
OUTLINE OF CONTENTS:	
1. Description of hardware by drawing number and nomenclature.	
2. Identification of hardware by serial number and lot number. 2. Description of parcenformance and the assignable cause.	
3. Description of nonconformance and the assignable cause.4. Corrective action assigned to specific individuals or functions.	
5. Disposition of the hardware:	
a. Accept as is	
b. Return to vendor	

- c. Repair
- d. Retest
- e. Scrap
- f. For Engineering use only "E" stamp
- g. Submit to failure analysis
- **6.** Approvals
 - a. Quality Assurance Engineering
 - b. Design engineering
 - c. Customer representative

ORGANIZATION ORIGINATING QA OFFICE RESPONSIBLE FOR DRD: CODE: DRD PREPARED BY: 7/28/67 NO. QA-008 TITLE OF DOCUMENT: PLAN, INSPECTION PLAN, INSPECTION ORGANIZATION RESPONSIBLE FOR DRD: ORGANIZATION RESPONSIBLE FOR DOCUMENT PREPARATION. PLAN, INSPECTION ORGANIZATION RESPONSIBLE FOR DRD: ORGANIZATION RESPONSIBLE FOR DOCUMENT REPRODUCTION. ORGANIZATION RESPONSIBLE FOR DOCUMENT REPRODUCTION. ORGANIZATION RESPONSIBLE FOR DOCUMENT DISTRIBUTION. TYPE OF DOCUMENT: CONTROL DACTION DREFERENCE DISPORMATION USE OF DOCUMENT: CONTROL DACTION DREFERENCE DISPORMATION USE OF DOCUMENT: TO document the parameters to be controlled during the manufacture cycle to assure the highest level-of quality consistent with drawing requirements. ORGANIZATION RESPONSIBLE FOR DOCUMENT STOWAGE: FOR DOCUMENT STOWAGE: ORGANIZATION RESPONSIBLE FOR DOCUMENT STOWAGE: FOR DOCUMENT STOWAGE: ESTIMATED MANHOURS FOR SINGLE PREPARATION: DATE OR MILESTONE: ORGANIZATION RESPONSIBLE FOR DOCUMENT STOWAGE: OR		DRD APPROVED	BY:	DATE:	DATA CATEGORY:			
TITLE OF DOCUMENT: PLAN, INSPECTION PROBLEMATION RESPONSIBLE FOR NO. ORGANIZATION RESPONSIBLE FOR NO. POR NO. ORGANIZATION RESPONSIBLE FOR NO. ORGANIZATION RESPONSIBLE FOR NO. POR NO. ORGANIZATION RESPONSIBLE FOR NO. POR NO. POR NO. PROBLEMATION RESPONSIBLE FOR NO. PROBLEMATION RESPONSIBLE FOR NO. POR NO. PROBLEMATION RESPONSIBLE FOR NO. PROBLE	VOYAGER DATA	REQUIREMENT DESCRIPTION						SAILGORY,
TITLE OF DOCUMENT: PLAN, INSPECTION PROBLEMATION RESPONSIBLE FOR NO. ORGANIZATION RESPONSIBLE FOR NO. POR NO. ORGANIZATION RESPONSIBLE FOR NO. ORGANIZATION RESPONSIBLE FOR NO. POR NO. ORGANIZATION RESPONSIBLE FOR NO. POR NO. POR NO. PROBLEMATION RESPONSIBLE FOR NO. PROBLEMATION RESPONSIBLE FOR NO. POR NO. PROBLEMATION RESPONSIBLE FOR NO. PROBLE	ORGANIZATION ORIGINATING CODE	OFFICE RESPONSIBLE FOR DE	RD: CODE:	DRD PREPA	RED BY:	DATE:	CONTRACT	DRD NO.:
PLAN, INSPECTION PLAN, INSPECTION Consider the presentation Consider the present	DECUMPEMENT:	or rise mesi stronger row si				1		04-008
PLAN, INSPECTION PLAN, INSPECTION Quality Assurance DRAMIZATION RESPONSIBLE DRAMIZATION RESPONSIBLE PROPRIATION							TASK OR	
PLAN, INSPECTION CREAMIZATION RESPONSIBLE OR NO. FILE NO.					FOR DOCUMENT	PREPARATION	SUBTASK:	NO.;
TYPE OF DOCUMENT: TYPE OF DOCUM	DIAN	INCDECTION		,				··
TYPE OF DOCUMENT. USE OF DOCUMENT. @CONTROL DACTION DREFERENCE DIFFORMATION	PLAN,	INSPECTION					DRL NO.:	LEVEL NO.:
TYPE OF DOCUMENT. USE OF DOCUMENT. @CONTROL DACTION DREFERENCE INFORMATION DREAD								
USE OF DOCUMENT USE OF DOCUMENT TO document the parameters to be controlled during the manufacture cycle to assure the highest level-of quality consistent with drawing requirements. INTERRELATIONSHIP WITH OTHER DATA REQUIREMENTS. MG-004. Manufacturing Planning QA-009, Plan, Quality Assurance Program SE-059 Drawings (Category E) for Manufacture and Procurement of Prime Equipment CLASSIFICATION. O GROUP 1 O SCHOPLE PREPARATION. O SCHOPLE PREPARATION. O SCHOPLE PREPARATION. O CHAPT O CHAPT O PROJECT DISCREET ON MANUALLY ON MINUTES O PROPRIES ON MANUAL O INSTRUCTION O CHAPT O DISCREET O DIAGRAM O BULLETIN O LIST O DIAGRAM O DISCLOSURE O MANUAL O DISCLOSURE O PROPRIES O DISCLOSURE O MANUAL O DISCLOSURE O PROPRIES O DISCLOSURE O MANUAL O DISCLOSURE O PROPRIES O DISCLOSURE O PROPRIES O DISCLOSURE O MANUAL O DISCLOSURE O PROPRIES O DISCLOSURE O MANUAL O DISCLOSURE O PROPRIES O PROPRIES O DISCLOSURE O MANUAL O DISCLOSURE O PROPRIES O PROPRIES O PROPRIES O PROPRIES O DISCLOSURE O MANUAL O DISCLOSURE O PROPRIES O PROPR]						DDL NO.;	FILE NO.
USE OF DOCUMENT: To document the parameters to be controlled during the manufacture cycle to assure the highest level-of quality consistent with drawing requirements. INTERRELATIONSHIP WITH OTHER DATA REQUIREMENTS: MG-001, Manufacturing Standing Instructions (MSIs) MG-012, *Request, Manufacturing Planning QA-009, Plan, Quality Assurance Program SE-059 Drawings (Category E) for Manufacture and Procurement of Prime Equipment CASSIFICATION O SECRETION O SEC	TYPE OF DOCUMENT:			IATION	FOR DOCUMENT	DISTRIBUTION:		
To document the parameters to be controlled during the manufacture cycle to assure the highest level-of quality consistent with drawing requirements. Secondary Consistent with drawing requirements.	BICONTROL	DACTION DREFERENCE	LI INFORIV	IATION	ORGANIZATION	RESPONSÍRI E	NO OF	COPIES
manufacture cycle to assure the highest level-of quality consistent with drawing requirements. Standard S		ters to be controlle	ed durii	ng the			110 01	JOI ILJ
CONSISTENT WITH drawing requirements. STIMATE MANHOURS FOR SINGLE PREPARATION. DATE DATA ON MILESTORE.	_			_				
INTERRELATIONSHIP WITH OTHER DATA REQUIREMENTS: MG-004, Manufacturing Standing Instructions (MSIs) MG-012, "Request, Manufacturing Planning SE-059 Plan, Quality Assurance Program Procurement of Prime Equipment CLASSIFICATION: O GROUP 1 O GROUP 2 O SPECIAL HANDLING O CONPIDENTIAL O GROUP 3 O GROUP 1 O GROUP 1 O GROUP 2 O SPECIAL HANDLING O CONPIDENTIAL O GROUP 3 O GROUP 1 O GROUP 3 O GROUP 1 O GROUP 3 O GROUP 3 O SPECIAL HANDLING O CONPIDENT CONTROL O GROUP 3 O SPECIAL HANDLING O CONFIDENTIAL O GROUP 3 O SPECIAL HANDLING O CONFIDENTIAL O GROUP 3 O GROUP 3 O SPECIAL HANDLING O CONFIDENTIAL O GROUP 3 O SPECIAL HANDLING O CONFIDENTIAL O GROUP 3 O SPECIAL HANDLING O CONFIDENTIAL O GROUP 3 O SPECIAL HANDLING O SEMI-ANNUALY O GRAINMONTH Y O SEMI-ANNUALY O GROUP 3 O SPECIAL HANDLING O GROUP 4 O GROUP 4 O GROUP 4 O GROUP 4 O GROUP 5 O GROUP 6 O GROUP 6 O GROUP 6 O GROUP 7	· · · · · · · · · · · · · · · · · · ·	•	•	,				
MG-004, Manufacturing Standing Instructions (MSIs) MG-012, *Request, Manufacturing Standing Instructions (MSIs) SE-059 Plan, Quality Assurance Program SE-059 Drawings (Category E) for Manufacture and Procurement of Prime Equipment CLASSIFICATION: CLASSIFICATION: O COMPLET O GROUP 2 O SPECIAL HANDLING OWN MINUALLY OWN MINUALLY OF SEMI-AMVUALLY OWN MINUALLY OWN MINUAL OWN MI	Ü	•			A SIX SHINGLE FF	///IION.	DATE OR I	
MG-004, Manufacturing Standing Instructions (MSIs) MG-0112, *Request, Manufacturing Standing Instructions (MSIs) FREQUENCY OF ISSUE: QA-009, Plan, Quality Assurance Program SE-059 Drawings (Category E) for Manufacture and Procurement of Prime Equipment GROUP 2 OSEGIAL HANDLING OSEGIAL OSEGIAL PROPERTY OF ISSUE: QUARTERLY OSEMI-AMVOLLY O				,	ESTIMATED (COST(\$)	DATE DA	ATA DUE
SE-059 Prawings (Category E) for Manufacture and Procurement of Prime Equipment CLASSIFICATION: O GROUP 1 O SPECIAL HANDLING O SEMI-ANNUALLY OS SHIM-ANNUALLY	INTERRELATIONSHIP WITH OTHER DATA MG-004 Manufacturing	REQUIREMENTS: Standing Instruction	18 (MS	Is)				
SE-059 Prawings (Category E) for Manufacture and Procurement of Prime Equipment CLASSIFICATION: O GROUP 1 O SPECIAL HANDLING O SEMI-ANNUALLY OS SHIM-ANNUALLY	MG-012, *Request, Man	ufacturing Planning	18 (1419)	15)				
Procurement of Prime Equipment CLASSIFICATION: O SECRET O GROUP 1 O GROUP 2 O GROUP 2 O GROUP 3	QA-009 , Plan, Quality A	Assurance Program			1	OF ISSUE:	PUBLICAT	ION DATE:
CLASSIFICATION: O SECRET O SCORPIDENTIAL O SCORPIDENTIAL O COMPRIENT CONFIDENTIAL O DIAGRAM O DIAGRAM O BULLETIN O DIAGRAM O DIRECTIVE O MANUAL O ILLUSTRATION O DIRECTIVE O RECORDING (TAPE OR DISC) O COMPRIENT CARD O COMPRIENT				ana	O SEMI-ANNU	ALLY	SDR	
CLASSIFICATION: O SECRET O OSECRET O	1 Tocurement of	i i i i i i c Equipinent	•		O BI-MONTHLY			
O SECRET O COMPUTER TAPE O REGISERING CHANGE O COMPUTER TAPE O REQUEST FOR ENGINEER: CAPE APPLICATION PROOF OATE SUBMIT FOR REVIEW TO: BY SUBMIT FOR APPROVAL TO O STANDARD OATE	CLASSIFICATION:	O GROUP I	·		O SEMI-MONTH	HLY	1.	
O SPORPHETARY O PUBLIC DOMAIN Q ONOFORM OF DATA: Na PRINTED DOCUMENT O ABSTRACT O INSTRUCTION O CHART BROCHURE O LETTER O DIAGAM O BULLETIN O LIST O DIAGRAM O BULLETIN O LIST O MANUAL O DIAGRAM O BULLETIN O LIST O MANUAL O ILLUSTRATION O DISCLOSURE O MINUTES O RECORDING (TAPE OR DISC) O SINSINEERING CHANGE O PROCEDURE O COMPUTER TAPE O REGULEST FOR ENGINEER- REGULATION O THER O HANDBOOK O STANDARD O OTHER O HANDBOOK O STANDARD O HORDER O RECVIEWS AND/OR APPROVALS REQUIRED: CLIST IN ORDER OF SUBMITTAL) SUBMIT FOR REVIEW TO. BY SUBMIT FOR REPROVAL TO BY SUBMIT FOR APPROVAL TO BY O SECRET RESTRICTED DATA O PROCEDURE O PROPOSAL O PROPED BY SUBMIT FOR APPROVAL TO BY SUBMIT FOR APPROVAL TO BY SUBMIT FOR APPROVAL TO BY O STANDARD O STANDA	O SECRET	O GROUP 2			☐ WEEKLY			
REVIEWS AND/OR APPROVALS REQUIRED: (LIST IN ORDER OF DATA: KIND OF DATA: KEFERENCE DOCUMENTS: Applicable NASA Spec. Applicable NASA Spec.	☐ SECRET RESTRICTED DATA	O GROUP 4	JPL DIS	CREET		AS SPECIFIED		
REVIEWS AND/OR APPROVALS REQUIRED: (LIST O DATE REVIEWS AND/OR APPROVALS REQUIRED: (LIST O DARAT O BULLETIN O LIST O DIAGRAM O BULLETIN O LIST O MANUAL O ILLUSTRATION O DIRECTIVE				3.00.122.	One time			
O CHART O DIAGRAM O BULLETIN O LIST O DRAWING O CATALOG O FILM (STATIC OR MOTION) O CONTRACT O MANUAL O ILLUSTRATION O DIRECTIVE O MEMORANDUM O MODEL O DISCLOSURE O MINUTES O RECORDING (TAPE OR DISC) O COMPUTER CARD O COMPUTER CARD O COMPUTER TAPE O COMPUTER TAPE O OTHER O OTHER O OTHER O OTHER O HANDBOOK O INDEX O HANDBOOK O INDEX O DATE REVIEWS AND/OR APPROVALS REQUIRED: (LIST IN ORDER OF SUBMITTAL) DRAFT DATE BY SUBMIT FOR REVIEW TO: BY APPROVAL TO BY APPROVAL TO APPROVAL TO BY APPROVAL TO APPROVAL BY	FORM OF DATA: KIND	OF DATA.			REFERENCE DOO	CUMENTS:		
O CHART O DIAGRAM O BULLETIN O LIST O DRAWING O CATALOG O FILM (STATIC OR MOTION) O CONTRACT O MANUAL O ILLUSTRATION O DIRECTIVE MEMORANDUM O MODEL O DISCLOSURE O MINUTES O RECORDING (TAPE OR DISC) O COMPUTER CARD O COMPUTER CARD O COMPUTER CARD O COMPUTER TAPE O COMPUTER TAPE O REQUEST FOR ENSINEER: REVIEWS AND/OR APPROVALS REQUIRED: (LIST IN ORDER OF SUBMITTAL) DRAFT DATE BY SUBMIT FOR REVIEW TO: BY BY BY BY BY BY BY BY BY B	PRINTED DOCUMENT				Annlicable	NASA Sn	ec	
O DRAWING O FILM (STATIC OR MOTION) O CONTRACT O MANUAL O ILLUSTRATION O DIRECTIVE MEMORANDUM O MODEL O DISCLOSURE O MINUTES O RECORDING (TAPE OR DISC) O ENGINEERING CHANGE O COMPUTER CARD O COMPUTER TAPE O COMPUTER TAPE O O THER O OTHER O OTHER O O STANDARD O OTHER O HANDBOOK O STANDARD O INDEX REVIEWS AND/OR APPROVALS REQUIRED: (LIST IN ORDER OF SUBMITTAL) DRAFT DATE BY SUBMIT FOR REVIEW TO: BY BY BY BY BY BY BY BY BY B				R	пррисави	Turbir Sp	cc.	
O FILM (STATIC OR MOTION) O ILLUSTRATION O DIRECTIVE MEMORANDUM O MODEL O DISCLOSURE O MINUTES O RECORDING (TAPE OR DISC) O COMPUTER CARD O COMPUTER TAPE O REQUEST FOR ENGINEER- REGULATION MICROFILM (W/OR W/O CARO) O OTHER O HANDBOOK O INDEX REVIEWS AND/OR APPROVALS REQUIRED: (LIST IN ORDER OF SUBMITTAL) DRAFT DATE BY SUBMIT FOR APPROVAL TO MEMORANDUM O MINUTES O PROCEDURE REGULATION INS CHANGE PROPOSAL O REPORT O STANDARD O INDEX O STANDARD O INDEX O DATE BY SUBMIT FOR REVIEW TO: BY BY BY BY BY BY BY BY BY B								
O ILLUSTRATION O DIRECTIVE				IAL				
O RECORDING (TAPE OR DISC) O ENGINEERING CHANGE O PROCEDURE O COMPUTER CARD ORDER O PROCEDURE O COMPUTER TAPE O REQUEST FOR ENGINEER- REGULATION O MICROFILM (W/OR W/O CARD) ING CHANGE PROPOSAL O REPORT O OTHER O ENGINEERING CHANGE SCHEDULE PROPOSAL SPECIFICATION O HANDBOOK O STANDARD O INDEX DATE REVIEWS AND/OR APPROVALS REQUIRED: (LIST IN ORDER OF SUBMITTAL) DRAFT DATE PREPUBLICATION PROOF OATE SUBMIT FOR REVIEW TO: BY SUBMIT FOR APPROVAL TO BY BY BY BY BY BY APPLICABLE STANDARDS: D APPLICABLE STANDARDS: APPLICABLE STANDARDS								
O COMPUTER CARD ORDER O PROCEDURE O COMPUTER TAPE O REQUEST FOR ENGINEER- REGULATION MICROFILM (W/OR W/O CARD) ING CHANGE PROPOSAL O REPORT O OTHER O ENGINEERING CHANGE PROPOSAL SPECIFICATION O HANDBOOK O STANDARD O INDEX . VOUCHER REVIEWS AND/OR APPROVALS REQUIRED: (LIST IN ORDER OF SUBMITTAL) DRAFT DATE PREPUBLICATION PROOF OATE SUBMIT FOR REVIEW TO: BY SUBMIT FOR APPROVAL TO BY BY BY	O MODEL	O DISCLOSURE						
O COMPUTER TAPE O REQUEST FOR ENGINEER- REGULATION MICROFILM (W/OR W/O CARD) ING CHANGE PROPOSAL O REPORT O OTHER	` '				APPLICABLE ST	ANDARDS:		
MICROFILM (W/OR W/O CARD) ING CHANGE PROPOSAL O REPORT O OTHER O ENGINEERING CHANGE PROPOSAL SPECIFICATION O HANDBOOK O INDEX O INDEX O INDEX O DATE REVIEWS AND/OR APPROVALS REQUIRED: (LIST IN ORDER OF SUBMITTAL) DRAFT DATE PREPUBLICATION PROOF OATE SUBMIT FOR REVIEW TO: BY SUBMIT FOR APPROVAL TO BY BY								
O OTHER O ENGINEERING CHANGE PROPOSAL SPECIFICATION O HANDBOOK O STANDARD O INDEX REVIEWS AND/OR APPROVALS REQUIRED: (LIST IN ORDER OF SUBMITTAL) DRAFT DATE PREPUBLICATION PROOF OATE SUBMIT FOR REVIEW TO: BY SUBMIT FOR APPROVAL BY APPROVAL TO BY BY BY BY BY BY BY BY								
O HANDBOOK O STANDARD O INDEX . D VOUCHER REVIEWS AND/OR APPROVALS REQUIRED: (LIST IN ORDER OF SUBMITTAL) DRAFT DATE PREPUBLICATION PROOF OATE SUBMIT FOR REVIEW TO: BY SUBMIT FOR APPROVAL TO BY BY BY			_					
REVIEWS AND/OR APPROVALS REQUIRED: (LIST IN ORDER OF SUBMITTAL) DRAFT DATE PREPUBLICATION PROOF OATE SUBMIT FOR REVIEW TO: BY SUBMIT FOR APPROVAL TO BY BY BY BY		PROPOSAL	☐ SPECI	FICATION				
REVIEWS AND/OR APPROVALS REQUIRED: (LIST IN ORDER OF SUBMITTAL) DRAFT DATE PREPUBLICATION PROOF OATE SUBMIT FOR REVIEW TO: BY BY BY BY BY	14.411							
SUBMIT FOR APPROVAL TO	· · · · · · · · · · · · · · · · · · ·	O INDEX .	□ VOUCH	HER				
SUBMIT FOR REVIEW TO: BY BY BY BY BY BY BY BY BY B		RED:						
SUBMIT FOR REVIEW TO:	,	DRAFT	DATE		PREPUBLICATION	N PROOF	0	_{ATF} 1
SUBMIT FOR APPROVAL TO BY BY BY BY BY	_		DATE		. KEI OBLIOATION	TROOF	O.	
SUBMIT FOR APPROVAL TO BY BY BY BY BY	SUBMIT FOR REVIEW TO:							
SUBMIT FOR APPROVAL TO BY BY								
APPROVAL TO BY BY		BY					,BY	
APPROVAL TO BY BY								
APPROVAL TO BY BY				_ =				
APPROVAL TO BY BY				_				
Manager, Quality Assurance		BY		_			ВҮ	
	Manager	, Quality Assurance)					

GE EXHIBIT DRD QA-008		
VOYAGER DATA REQUIREMENT DESCRIPTION - 2	2ND SHEET	
SPECIAL INSTRUCTIONS:		D NO.:
For critical processes special inspection planning is issued. subcontractor/vendor level similar in content to this DRD is		
SPECIAL DISTRIBUTION: (IF DISTRIBUTION IS NOT COVERED BY AN EXISTING, DDL WRITE IN	L DISTRIBUTION BELOW)	
None		

OUTLINE OF CONTENTS:

Inspection Planning contains control parameters that specify attributes to be inspected and lists any special inspection tooling required to verify conformance to the Quality Assurance Plan during the manufacturing cycle.

- 1. Hardware drawing number
- 2. Hardware nomenclature
- 3. Project
- 4. NHA number
- Applicable specifications (manufacturing standing instructions, military standard, etc.)
- **6.** Operation number

VOYAGER DAT	A REOUIREMENT DESCRIPTION	, , 		DRD APPROVED	BY.	DATE:	DATA CATEGORY:
						CONTRACT	DRD NO.:
ORGANIZATION ORIGINATING CODE REQUIREMENT QA	OFFICE RESPONSIBLE FOR	DRD: CODE	DRD PREPA	ARED BY: Smyth	DATE: 7/28/67	CONTRACT NO.:	2A=001
TITLE OF DOCUMENT:	_L			URGANIZATION F		TASK OR	DRL ITEM
				FOR DOCUMENT		SUBTASK:	NO,:
PLAN, QUALITY ASSU	RANCE PROGRAM	[Quality As		DRL NO.	LEVEL NO
, (FOR DOCUMENT		DIKL NO	LEVEL NO.
			-	ORGANIZATION FOR DOCUMENT		DDL NO.:	FILE NO.:
TYPE OF DOCUMENT; MICONTROL	DACTION DREFERENCE	□ INFORM	ATION				
USE OF DOCUMENT:	Dromam Dlan dofin	haa aad	i	ORGANIZATION		NO OF	COPIES
The Quality Assurance corporates all contract				FOR DOCUMEN	II STOWAGE.	1	0
ment of specific quality				ESTIMATED	MANHOLIBS	INFORMAT	ION CUTOFF
levels of hardware fabr	ication, test and ac	cceptanc	e by	FOR SINGLE PR			MILESTONE:
the customer.							
INTERRELATIONSHIP WITH OTHER DA	TA REQUIREMENTS:			ESTIMATED (FOR SINGLE PR			ATA DUE JSER
MG-009, Plan, Manufa				TOK SINGLE TI	CEI AIXATION.	10 (JOEK
RA-015, Report, Failu	re Review			FREQUENCY	OF ISSUE.	PUBLICAT	ION DATE:
SC-002, Schedule, Pro		1 /DED#		O ANNUALLY		SDI	
SC-004, Schedule, Tas		I (PERT)	O SEMI-ANNUA O OUARTERLY	ALLY		
SE-006, Plan, Cleanlii	ness Control			BI-MONTHLY O MONTHLY			REQUENCY STONE).
CLASSIFICATION:	O GROUP I	0.0050141		O SEMI-MONTH O 81-WEEKLY	ILY	rhrough	
☐ SECRET ☐ CONFIDENTIAL	O GROUP 2 O GROUP 3	O SPECIAL NASA DIS	CREET	O DAILY		ESTIN	MATED
O SECRET RESTRICTED DATA O CONFIDENTIAL RESTRICTED DATA		O JPL DIS O PROJECT		X OTHERWISE,	AS SPECIFIED	EXPIRATI	ON DATE'
XX UNCLASSIFIED	D PUBLIC DOMAIN	O NOFORN		One time	_		
FORM OF DATA: KII	ND OF DATA'			REFERENCE DOO	CUMENTS:		
☑ PRINTED DOCUMENT	O ABSTRACT		UCTION	NPC - 2	200-2, 200)–3 and 2	00-4
O CHART O DIAGRAM	O BROCHURE O BULLETIN	O LETTE O LIST	:K		, ,		
D DRAWING	O CATALOG	O LOG					
☐ FILM (STATIC OR MOTION)	O CONTRACT	☐ MANU	IAL				
O ILLUSTRATION	O DIRECTIVE	☐ MEMO					
MODEL O DECORDING (TABLE OF DISC)	O DISCLOSURE	O MINUT	ES	APPLICABLE STA	ANDARDS:		
O RECORDING (TAPE OR DISC) O COMPUTER CARD	O ENGINEERING CHANGE ORDER	O PROCI	EDURE	ATTEICABLE 317	ANDANDO.		
COMPUTER TAPE	O REQUEST FOR ENGINEE						
☐ MICROFILM (W/OR W/O CARD							
O OTHER	O ENGINEERING CHANGE						
	PROPOSAL O HANDBOOK	O STANI	FICATION				
	☐ INDEX	O VOUCH					
REVIEWS AND/OR APPROVALS REO (LIST IN ORDER OF SUBMITTAL)	UIRED:						
,	DRAFT	DATE		PREPUBLICATION	N PROOF	D	ATE
SUBMIT FOR REVIEW TO:							
	ВҮ					ВҮ ——	
SUBMIT FOR	BY					ВҮ ——	
APPROVAL TO Project						<u> </u>	
Project	Manager						

PAGE I OF 2

OE EXHIBIT DIO QA-007	
VOYAGER DATA REQUIREMENT DESCRIPTION - 2ND SHEET	
SPECIAL INSTRUCTIONS'	DRD NO .:
None	QA-00!
Tone	
SPECIAL DISTRIBUTION (IF DISTRIBUTION IS NOT COVERED BY AN EXISTING DDL WRITE IN DISTRIBUTION BELOW)	

OUTLINE OF CONTENTS:

Delineates the implementation of the controls proposed by the system contractor necessary to meet the requirements of NPC 200-2 and the customer work statement. Contents are a sfollows

- 1. Introduction
- 2. Approach/Problems
 - a. Traceability
 - b. Customer/Contractor Relationship
 - c. Life-Sensitive Flight Hardware
 - d. Cleanliness
- 3. Management
 - a. GE
 - b. Major Subcontractors
 - c. Program Management
- 4. Program Controls
 - a. Design and development control
 - b. Control of procured material
 - c. Control of contractor's fabricated articles
 - d. Test controls
 - e. **Data** reporting and corrective action
 - f. QA audits
 - g. Inspection, measuring and test equipment
- 5. Relationship with other management plans

VOYAGER DATA REQUIREMENT DESCRIPTION						3Y	DATE:	DATA CATEGORY:
	· 1							DRD NO.:
RECHIREMENT		OFFICE RESPONSIBLE FOR	DRD: COI	1		DATE	CONTRACT NO.:	
•)A		L_	Т.	Smyth	7/28/67		QA-010
TITLE OF DOCUMENT:					ORGANIZATION FOR DOCUMENT	PREPARATION:	TASK OR SUBTASK:	DRL ITEM NO.;
					Quality Ass			,
PLAN,	SAM	IPLING			ORGANIZATION F		DRL NO.:	LEVEL NO.:
					FOR DOCUMENT F			
					ORGANIZATION F		DDL NO.;	FILE NO
TYPE OF DOCUMENT: MECONTRO	DL 0	ACTION DREFERENCE		RMATION	TOR BOCOMENT			
USE OF DOCUMENT:	41	the established s	1 a		ORGANIZATION I		NO OF	COPIES:
To document and con			-		FOR DOCUMEN	I STOWAGE:	5	5
necessary to maintai			•				INFORMAT	ION CUTOEF
coming bulk materia	-			* •	ESTIMATED I FOR SINGLE PR			ION CUTOFF MILESTONE:
fuses, etc. The plan			шраш	ore with				
the quality requirem	,	<u> </u>			ESTIMATED C		a de la companya de	ATA'DUE
INTERRELATIONSHIP WITH OTHER					FOR SINGLE PR	LEPARATION.	TO U	JSER:
QA-009, Plan, Quali	ity A	ssurance Progran	n		FREQUENCIA	OF 100115	<u> </u>	
QA-019, Record, Te	est (N	Materials, Parts,	Suba	ssemblies)		OF ISSUE:	PUBLICAT	ION DATE.
					O ANNUALLY O SEMI-ANNUA	LLY	SD	R
					O QUARTERLY O 81-MONTHLY		UPDATE (F	REOUENCY
2(A 22 (FIO A FIO A)		0.00010.1			☐ MONTHLY ☐ SEMI-MONTH	LY		STONE):
CLASSIFICATION:		O GROUP 1 O GROUP 2		AL HANDLING	O 81-WEEKLY WEEKLY		Through	
CONFIDENTIAL O SECRET RESTRICTED DATA		O GROUP 3 O GROUP 4	OJPL	DISCREET DISCREET	O DAILY	AS SDECIEIED	ESTIN EXPIRATI	MATED ON DATE'
O CONFIDENTIAL RESTRICTED EUNCLASSIFIED	DATA	O PROPRIETARY O PUBLIC DOMAIN	O PROJI O NOFO	ECT DISCREET RN	One time			011 27112
		0= 0.74	******		REFERENCE DOC		<u> </u>	
FORM OF DATA: E PRINTED DOCUMENT		OF DATA: O ABSTRACT	П ім	STRUCTION	MIL- ST			
CHART		O BROCHURE	O LE		NPC 200			
□ DIAGRAM		O BULLETIN	O LIS		NFC 200)- <i>L</i>		
☐ DRAWING		O CATALOG	ОΩ	G				
O FILM (STATIC OR MOTION	۷)	O CONTRACT	O M/	ANUAL				
O ILLUSTRATION		O DIRECTIVE		MORANDUM				
☐ MODEL ☐ RECORDING (TAPE OR D		O DISCLOSURE O ENGINEERING CHANGE	M O MI	NUTES An	APPLICABLE STA	ANDARDS'		
O COMPUTER CARD	100)	ORDER		OCEDURE	2.0, 317			
O COMPUTER TAPE		O REQUEST FOR ENGINEE						
O MICROFILM (W/OR W/O	CARD)	ING CHANGE PROPOS	AL O RE	WRT				
☐ OTHER		O ENGINEERING CHANGE		HEDULE				
		PROPOSAL		ECIFICATION				
		O HANDBOOK O INDEX		ANDARD UCHER				
	_	· INDEX						
REVIEWS AND/OR APPROVALS	REQUIRE	ED:						· · · · · · · · · · · · · · · · · · ·
(LIST IN ORDER OF SUBMITTAL)	DF	RAFT	DATE	<u> </u>	PREPUBLICATION	PROOF	ח	ATE
							_	
SUBMIT FOR REVIEW TO:					<u>, i , </u>	<u></u>	***************************************	
			i		<u> </u>			
		ВҮ					ВҮ	
SUBMIT FOR		BY					ВҮ	
APPROVAL TO' Man	ger	Quality Assuranc	e					
	~ ₅ ~ ₁ ,	- Tibbaranc	_					

PAGE I OF 2

VOYAGER DATA REQUIREMENT DESCRIPTION - 2ND SHEET

SPECIAL INSTRUCTIONS'

DRD NO.: QA-010

Incoming inspection planning with the Quality Assurance Engineer determines the acceptable quality levels for incoming inspection of bulk material or special articles and specifies the sampling plan for the lot size. A DRD at the subcontractor/vendor level similar in content to this **DRD** is required.

SPECIAL DISTRIBUTION. (IF DISTRIBUTION IS NOT COVERED BY AN EXISTING, DDL WRITE IN DISTRIBUTION BELOW)

OUTLINE OF CONTENTS:

- 1. Hardware drawing number
- 2. Hardware nomenclature
- 3. Applicable specifications
- 4. Lot size
- 5. Sample size
- 6. Acceptance criteria
- 7. Operating characteristic curve
- 8. Space **for** recording data
- 9. Signature of originator
- 10. Revision number of planning
- 11. Date

VOVACED THE					DRD APPROVED B	Υ	DATE:	DATA CATEGORY:
· VO	YAGER DATA I	REQUIREMENT DESCRIPTION						ONIEGUKY.
ORGANIZATION ORIGINATING	CODE	OFFICE RESPONSIBLE FOR C	ORD! CODE	DRD PREPA	ARED BY:	DATE ⁻	CONTRACT	DRD NO.:
REQUIREMENT:	QA	S. S. ISIDEL TON (l	F. Smyth	7/28/67	NO.:	OA. 011
TITLE OF BOOLEST	المثريا			1.	F. Smyth		TASK OR	QA-011 DRL ITEM
TITLE OF DOCUMENT:				1	ORGANIZATION RI		SUBTASK:	NO.:
DIANI TERTA		ATING FOR CRE	CTAT		Quality Assı	ırance	1 1	Į
•		RATING, FOR SPE	CIAL		DRGANIZATION	UNUNULL	DIRL NO	LEVEL NO.:
TEST EQUIPME	ли1, (ST	E), COMPONENT			FOR DOCUMENT R			
							·	
					ORGANIZATION R FOR DOCUMENT D		DDL NO.;	FILE NO.:
TYPE OF DOCUMENT:	CONTROL (DACTION DREFERENCE	O INFORM	IATION	, ON DOCUMENT L	AOTRIDUTIUN.		
USE OF DOCUMENT:	·				ORGANIZATION R	ESPONSIBLE	NO OF (COPIES.
To document the	detailed	d checkout procedu	re of th	e test	FOR DOCUMENT		5	
		ing with flight hard						
1		6 Inglit half			ESTIMATED N			ION CUTOFF
					ON SINGLE PRI	LI ANATION	שלוב טע ו	WILLS I UNE.
					ECTIMATES)CT / Å\	DATE D	ATA DUE
INTERRELATIONSHIP WITH	OTHER DATA	REQUIREMENTS:			ESTIMATED CO FOR SINGLE PRI			ATA DUE JSER.
							1	
TE-001, Plan,	Integrated	d Test			FREQUENCY (OF ISSUE:	PUBLICAT	ION DATE.
					O ANNUALLY	i.v.	HDR	1
					O SEMI-ANNUAL O QUARTERLY	LLY		
					O BI-MONTHLY O MONTHLY	İ		REQUENCY STONE):
CLASSIFICATION:		O GROUP I			O SEMI-MONTHL O 81-WEEKLY	ĽΥ	Through	,
O SECRET O CONFIDENTIAL		O GROUP 2 O GROUP 3	O SPECIAL O NASA DIS		O WEEKLY	:		MATED
SECRET RESTRICTED O CONFIDENTIAL REST		O GROUP 4	O JPL DIS	CREET	O DAILY OTHERWISE, A	S SPECIFIED	EXPIRATION	
TUNCLASSIFIED	DAIA		O NOFORN		As requir	ed		
DRM OF DATA: ,	KIND	O OF DATA.			REFERENCE DOC	UMENTS:		
🕱 PRINTED DOCUM	/ENT	O ABSTRACT	☐ INSTR	RUCTION	I			
O CHART		O BROCHURE	O LETTE	ER	İ			
O DIAGRAM		O BULLETIN	O LIST		I			
O DRAWING	MOTION"	O CATALOG	O LOG	141	I			
O FILM (STATIC OR O ILLUSTRATION	IVIO I ION)	O CONTRACT O DIRECTIVE	O MANU	JAL DRANDUM	I			
O ILLUSTRATION O MODEL		O DISCLOSURE	O MINU		İ			
RECORDING (TAP	E OR DISC)	O ENGINEERING CHANGE	₩ PLAN		APPLICABLE STA	NDARDS.		
O COMPUTER CARD	*	ORDER	O PROC		İ			
O COMPUTER TAPE		☐ REQUEST FOR ENGINEE			I			
O MICROFILM (\)/O	R W/O CARD)	ING CHANGE PROPOSA	_		I			
O OTHER		O ENGINEERING CHANGE	SCHE		İ			
		PROPOSAL O HANDROOK		IFICATION DARD	İ			
		O HANDBOOK O INDEX	O STANI		I			
					<u></u>			
REVIEWS AND/OR APPRO		RED:			<u> </u>			
LIST IN ORDER OF SUBI	,	DRAFT	DATE		PREPUBLICATION	PROOF	L	ATE
	L		PVIE		THE UDEICATION	, NOOF	U.	
CUDAIT FOR BELLET								
SUBMIT FOR REVIEW TO:		<u> </u>						
'		ВҮ					BY	
,								
		 -						
		 -						
SUBMIT FOR								
APPROVAL TO		BY					ВҮ	
] .	Manager	, Quality Ass uranc	e					

PAGE LOF 2

JPL 2568 ℃T 6'

GE EATHDIT DRD &A-VII	
VOYAGER DATA REQUIREMENT DESCRIPTION - 2ND SHEET	
SPECIAL INSTRUCTIONS!	A-01
SPECIAL DISTRIBUTION. (IF DISTRIBUTION IS NOT COVERED BY AN EXISTING DDL WRITE IN DISTRIBUTION BELOW)	
OUTLINE OF CONTENTS: 1. Description of the test equipment. 2. Detail of the parameters to be tested for and checkout procedures for each parameter. 3. Facilities and peripheral equipment needed to supplement the test equipment. 4. Initial wiring checkout procedures. 5. Operational checkout with a simulated test procedure and a sample data sheet. 6. Special precautions to be taken by operator to assure confidence in the data and integr of the test.	

VOYA	GER DATA	REQUIREMENT DESCRIPTION	N		DRD APPROVED BY	γ.	DATE:	DATA CATEGORY:
ORGANIZATION ORIGINATING	CODE:	OFFICE RESPONSIBLE FOR	DRD: CODE	DRD PREP	ARED BY:	DATE	CONTRACT	DRD NO.:
REQUIREMENT.	QA			T. 3	Smyth	7/28/67	NO.:	QA-012
TITLE OF DOCUMENT:				<u> </u>	ORGANIZATION RE	ESWNSIBLE	TASK OR	DRL ITEM
THEE OF BOOOMENT.					FOR DOCUMENT P		SUBTASK:	NO.:
					Quality Ass	urance		
PROCEDU	JRE, PR	OCESS CONTROL	L		ORGANIZATION RI FOR DOCUMENT RI		DRL NO.:	LEVEL NO.:
					ORGANIZATION R FOR DOCUMENT D		DD. NO.:	FILE NO
TYPE OF DOCUMENT: XIC	ONTROL	DACTION DREFERENCE	□ INFOR	MATION			I	
USE OF DOCUMENT:				_	ORGANIZ A TION R		NO OF	COPIES
•	_	step operating inst			FOR DOCUMENT	STOWAGE.	10)
•	•	tions such as radi		•	<u> </u>			
•		procedures will su			ESTIMATED M FOR SINGLE PRE			ON CUTOFF
contained in Man	ufacturi	ng Standing Instru	ictions.					
		region of the second of the s	 		ESTIMATED CO		DATE D	ATA DUE
INTERRELATIONSHIP WITH C	THER DATA	REQUIREMENTS:			FOR SINGLE PRE		TO U	JSER.
MG-004, Manufa	cturing	Standing Instructi	ons (M	SIs)	<u> </u>			
MG-009, Plan, N	_	0	`	,	FREQUENCY (OF ISSUE:	PUBLICAT	ION DATE
		Assurance Progra	m		O SEMI-ANNUAL	IV	SD	R
					O QUARTERLY BI-MONTHLY	- L I	UPDATE (F	REQUENCY
					□ MONTHLY	V		STONE)
CLASSIFICATION: O SECRET		O GROUP I O GROUP 2	O SPECIA	L HANDLING	O SEMI-MONTHL B1-WEEKLY	_Y	Through	n CDR
CONFIDENTIAL SECRET RESTRICTED D	Λ Τ Λ	GROUP 3 GROUP 4	O NASA I	DISCREET	O WEEKLY D DAILY		1	MATED
O CONFIDENTIAL RESTR		□ PROPRIETARY	O PROJEC	CT DISCREET	TO OTHERWISE, A	S SPECIFIED	EXPIRATI	ON DATE
■ MUNCLASSIFIED		O PUBLIC DOMAIN	O NOFOR	N 	One time			
FORM OF DATA:	KINE	O OF DATA:		÷	REFERENCE DOC	UMENTS:		
X PRINTED DOCUME	NT	O ABSTRACT		TRUCTION	NPC 200	-2, 200-	3, 200-4	
O CHART		O BROCHURE	O LET					
O DIAGRAM O DRAWING		O BULLETIN O CATALOG	☐ LOG					
O FILM (STATIC OR M	IOTION)	O CONTRACT	O MAI					
O ILLUSTRATION	,	O DIRECTIVE	O MEN	MORANDUM				
O MODEL		☐ DISCLOSURE	O MIN	UTES				
RECORDING (TAPE	OR DISC)	ENGINEERING CHANGE			APPLICABLE STA	NDARDS:		
O COMPUTER CARD		ORDER		CEDURE				
O COMPUTER TAPE MICROFILM (W/OR	W/O CADD	REQUEST FOR ENGINE						
O OTHER	HIO CARD)	O ENGINEERING CHANGE		IEDULE	1			
		PROPOSAL		CIFICATION				
		O HANDBOOK	O STA	NDARD				
		O INDEX	O VOL	ICHER				
REVIEWS AND/OR APPROV	AIS DEOL!	PED:			-1		- Late to Breet, report	
(LIST IN ORDER OF SUBMI		ILD.						
	İ	DRAFT	DATE		PREPUBLICATION	PROOF	D	ATE
SUBMIT FOR REVIEW TO' -								
-							ВҮ —	
-								
-								
_								
CLIDMIT FOR								
SUBMIT FOR APPROVAL TO		BY					ВҮ	
<u>N</u>	<u>Ianager</u>	<u>, Quality Ass</u> uran	c <u>e</u>					

PAGE I OF 2

	GE EXHIBIT DRD QA-012	
	VOYAGER DATA REQUIREMENT DESCRIPTION - 2ND SHEET	
SPECIA	L INSTRUCTIONS:	DRD NO.: QA-01;
	•	
CDECIAL	DISTRIBUTION (LE DISTRIBUTION LE NOT COVERED DY AN EVISTING DOL WRITE IN DISTRIBUTION RELOWA	
SPECIAL	L DISTRIBUTION. (IF OISTRIBUTION IS NOT COVERED BY AN EXISTING DDL WRITE IN, DISTRIBUTION BELOW)	
OUTLIN	NE OF CONTENTS:	
1.	Procedure defines the process to be controlled.	
2.	Document the parameters to be controlled for the preparation of the material.	ainad
3.	Delineate all controls for the fabrication process by specific conditions to be maintaduring the processing.	annea
4. 5.	Define the methods of verification and documentation of the process verification. Describe method of verification and the maintenance of special environments to be maintained.	
6.	References the workmanship standards to be followed.	

VOYAGER DATA REQUIREMENT DESCRIPTION					DRD APPROVED BY	Y	DATE:	DATA CATEGORY:	
-						7		DRD NO.:	
ORGANIZATION ORIGINATING REQUIREMENT:	1	OFFICE RESPONSIBLE FOR	R DRD: C			DATE:	CONTRACT NO.:		
	QA			T. Sn	nyth	7/28/67		QA-013	
TITLE OF DOCUMENT:					ORGANIZATION RE		TASK OR	DRL ITEM	
					FOR DOCUMENT P		SUBTASK:	NO.:	
DD OCEDIDE 1	ntacım <i>k</i> arı				Quality Ass				
PROCEDURE, 7	LEST/IN:	SPECTION			ORGANIZATION RI		DRL NO	LEVEL NO.:	
					FOR DOCUMENT RE	=PRODUCTION;			
					ORGANIZATION RI		DDL NO.:	FILE NO.:	
TYPE OF DOCUMENT	CONTROL	DACTION DOCTORNO	- 0 101	TODA MATION.	FOR DOCUMENT D	ISTRIBUTION,			
USE OF DOCUMENT	CONTROL	DACTION DREFERENCE	. UIN	FORMATION					
	00000***	specific test inan			ORGANIZATION R FOR DOCUMENT		NO OF	COPIES	
1	-	specific test/inspe				0.0102	10		
procedures to be	e periori	ned on the system	1/subs	ystem.	FOTIMATED	ANUGUEO	INFORMATION CUTOFF		
					ESTIMATED M FOR SINGLE PRE			MILESTONE:	
					ESTIMATED CO	DST (&)	DATE DA	ATA DUE	
INTERRELATIONSHP WITH	OTHER DATA	REOUIREMENTS:			FOR SINGLE PRE		DATE DATA DUE TO USER		
MG-004, Manuf	acturing	Standing Instructi	ons (I	MSIS)					
QA-006, Manual	l, Workn	nanship Standards	S		FREQUENCY C	OF ISSUE	PLIBLICAT	ION DATE	
OA-009, Plan, 0	Ouality A	Assurance Progra	m		☐ ANNUALLY	0002	TOBLICAT	ION DAIL	
1	-	and Limited Life 1			O SEMI-ANNUAL	LY.	SD)R	
RA-005, List, I					☐ QUARTERLY ☐ BI-MONTHLY		UPDATE (F	REQUENCY	
CLASSIFICATION:	arts rip				☐ MONTHLY ☐ SEMI-MONTHL	v	OR MILE	STONE)	
□ SECRET		GROUP I GROUP 2	☐ SPE	CIAL HANDLING	☐ 81-WEEKLY		rhrough	ı CDR	
O CONFIDENTIAL SECRET RESTRICTED	DATA	☐ GROUP 3 ☐ GROUP 4	□ NAS.	A DISCREET DISCREET	☐ WEEKLY ☐ DAILY			IATED	
O CONFIDENTIAL REST		A ☐ PROPRIETARY	☐ PRO	JECT DISCREET	X OTHERWISE, A	\$ SPECIFIED	EXPIRATION	ON DATE	
M UNCLASSIFIED		☐ PUBLIC DOMAIN	□ NOF	DRN	One time				
FORM OF DATA: ,	KIN	D OF DATA.			REFERENCE DOCU	JMENTS:			
X) PRINTED DOCUM	MENT	O ABSTRACT	□ II	NSTRUCTION					
O CHART		O BROCHURE	O L	ETTER					
☐ DIAGRAM		☐ BULLETIN	O L	IST					
☐ DRAWING		O CATALOG	O L	OG					
☐ FILM (STATIC OR	MOTION)	☐ CONTRACT	O M	IANUAL					
☐ ILLUSTRATION		O DIRECTIVE		IEMORANDUM					
□ MODEL		O DISCLOSURE		MINUTES	ABBUIGABLE STA	UDA DDO			
O RECORDING (TAP	*	O ENGINEERING CHANGI			APPLICABLE STAI	NDARDS.		*	
COMPUTER CARD		ORDER	_	ROCEDURE					
O COMPUTER TAPE		☐ REQUEST FOR ENGINE ING CHANGE PROPO							
☐ MICROFILM (₩/.0 O OTHER	R W/U CAKD)	O ENGINEERING CHANGI		CHEDULE					
OOHEK		PROPOSAL		PECIFICATION					
		O HANDBOOK		TANDARD					
		O INDEX		OUCHER					
					<u></u>	·			
REVIEWS AND/OR APPRO		IRED:							
(LIST IN ORDER OF SUBI		DRAFT	DAT	F	PREPUBLICATION	PROOF	ח	ATE	
			ואט	-	. REI OBLIGATION	. 1.001	וט		
SUBMIT FOR REVIEW TO									
SUBMIT FOR REVIEW TO' .			****						
		BY					ВҮ		
									
				· · · · · ·			<u></u>	·	
_							******************************		
									
SUBMIT FOR APPROVAL TO	, , , , , , , , , , , , , , , , , , , 	BY				······································	BY		
*** I NOVAL TO	Manage	r, Quality Assura	nce				-		
	manage	, Quality 1135ula							

GE LAHIDIT DAD QA-VIS	
VOYAGER DATA REQUIREMENT DESCRIPTION - 2ND SHEET	
SPECIAL INSTRUCTIONS:	DRD NO.: QA-01
Specific detailed procedures are written for each inspection and test operation. A DRD at the subcontractor/vendor level similar in content to this DRD is required.	<u> </u>
SPECIAL DISTRIBUTION (IF DISTRIBUTION IS NOT COVERED BY AN EXISTING DDL WRITE IN DISTRIBUTION BELOW)	
•	
i	

OUTLINE OF CONTENTS:

- 1. Identifies the article to be inspected or tested by its specific drawing number, latest revision, serial and lot number.
- 2. Defines the objectives of test/inspection.
- 3. Specifies the equipment to be used including the range, accuracy required, and type.
- 4. Details the test operator's /inspector's operation to be performed, the exact method of measuring or testing.
- 5. Details the exact conditions to be maintained during test/inspection including environmental and precautions for the protection of article and instruments.
- **6.** Establishes the criteria for acceptance or rejection of the article being tested or inspected including workmanship standards.
- 7. Identifies the test specifications and the test procedures to be followed (standing instructions).
- 8. Reports the test cycle and schedule to be followed.

					DRD APPROVED BY		DATA CATEGORY:
VOYAGER DATA	REQUIREMENT DESCRIPTION					,	
ORGANIZATION ORIGINATING CODE:	OFFICE RESPONSIBLE FOR D	RD: CODE	DRD PREPA	ARED BY:	I DATE.	CONTRACT	DRD NO.:
REQUIREMENT. QA			J.R.	Gottshall	7/28/6 7	NO.:	QA-014
TITLE OF DOCUMENT:	The state of the s			ORGANIZATION		TASK OR	DRL ITEM
				FOR DOCUMENT		SUBTASK:	NO.;
				Quality As			
PROCEDURE	, REWORK			(IRGANIZATION FOR DOCUMENT		DRL NO.	LEVEL NO.:
				ORGANIZATION	RESPONSIBLE	DOL NO.:	FILE NO
TUDE OF BOOKINESSES				I'OR DOCUMENT	DISTRIBUTION:		
and the second s	DACTION DREFERENCE	INFORM	ATION	·			
USE OF DOCUMENT.				FOR DOCUME	NT STOWAGE:	NO OF	
						51	0
To outline the steps and a	approvals required	to -		ESTIMATED			ON CUTOFF
process any rework.				FOR SINGLE P	'REPARATION'	DATE OR MILESTONE	
INTERRELATIONSHIP WITH OTHER DATA	REQUIREMENTS:		,	ESTIMATED FOR SINGLE F	COST (\$) PREPARATION.		ATA DUE JSER:
14G 000 Pl 14 6				1			
MG-009, Plan, Manufact	_			FREQUENCY	OF ISSUE:	PUBLICAT	ION DATE:
RA-009, Plan, Reliabilit	•			O ANNUALLY	141137	PD	R
RA-014, Standard, Rewo	ork			O SEMI-ANNU QUARTERLY			
				O BI-MONTHL O MONTHLY		OR MILI	REQUENCY ESTONE)
CLASS IFICATION:	O GROUP I O GROUP 2	□ SPECIAI	HANDLING	O SEMI-MONT	THLY	As Rec	uired h CDR
O CONFIDENTIAL	O GROUP 3	O NASA DIS O JPL DIS	SCREET	O WEEKLY O DAILY		ESTIN	MATED
O SECRET RESTRICTED DATA CONFIDENTIAL RESTRICTED DATA	O PROPRIETARY	O PROJECT			AS SPECIFIED	EXPIRATI	ON DATE:
M UNCLASSIFIED	O PUBLIC DOMAIN	O NOFDRN	·; ··· . · · · · · · · · · · · · · · · ·	One tim		<u> </u>	-
	O OF DATA.			REFERENCE DO			
PRINTED DOCUMENT O CHART	☐ ABSTRACT O BROCHURE	O LETTI		NPC 200	J - 2		
O DIAGRAM	O BULLETIN	O LIST	-10			• •	
O DRAWING	O CATALOG	O LOG					
☐ FILM (STATIC OR MOTION)	O CONTRACT	O MANU	JAL				-
O ILLUSTRATION	O DIRECTIVE		RANDUM				
☐ MODEL ☐ RECORDING (TAPE OR DISC)	O DISCLOSURE O ENGINEERING CHANGE	☐ MINU		APPLICABLE S	TANDARDS		·
☐ COMPUTER CARD	ORDER	☐ PROC					
O COMPUTER TAPE	O REQUEST FOR ENGINEER	R- 🗆 REGU	ILATION				
☐ MICROFILM (W/OR W/O CARD)	ING CHANGE PROPOSA	_					
O OTHER	ENGINEERING CHANGEPROPOSAL	O SPEC	DULE IFICATION				
	O HANDBOOK	O STAN					
	O INDEX	O VOUC					
DEVIEWS AND/OD APPROVALS SEC.	DED.			•			
REVIEWS AND/OR APPROVALS REQUI (LIST IN ORDER OF SUBMITTAL)	ועבח:						
1	DRAFT	DATE		PREPUBLICATION	N PROOF	D	ATE
•							
SUBMIT FOR REVIEW TO:							
	BY -					ВҮ	
	 -						
	-						
							
SUBMIT FOR	BY			· · · · · · · · · · · · · · · · · · ·		ВҮ ——	
APPROVAL TO Manager (Quality Assurance						
wianager,	quarry Assurance_						

VOYAGER DATA REQUIREMENT DESCRIPTION - 2ND SHEET	
SPECIAL INSTRUCTIONS' QA-	NO.:
The procedure will implement and conform to the rework policies specified by the Reliability Section.	
-	
SPECIAL DISTRIBUTION (IF DISTRIBUTION IS NOT COVERED BY AN EXISTING DDL WRITE IN DISTRIBUTION BELOW)	
OUTLINE OF CONTENTS:	
l. Purpose 2. Scope	
3. Definitions4. Responsibilities	
5. Procedures	
(CONTINUE ON THIRD SHEET, IF NECESSARY, AND AFFIX TO THIS DRD.)	

-2-

VOYA	AGER DATA	REQUIREMENT DESCRIPTION	Ņ		DRD APPROVED BY		DATE:	DATA CATEGORY:	
ORCANIZATION ORIGINATING	CODE:	OFFICE RESPONSIBLE FOR	nen:	CODE: DRD PREP	VOED BY:	DATE:	CONTRACT	DRD NO.:	
ORGANIZATION ORIGINATING REQUIREMENT:	QA	OFFICE RESPONSIBLE FOR	י טאט.	1		i i	NO.:	1	
			T. F. S		7/28/67		QA-015		
					ORGANIZATION RE		TASK OR SUBTASK	DRL ITEM NO.;	
					Quality Assi		0001701	1,10	
DDOCEDIDE A	DEA C	ONTROL							
PROCEDURE, A	KEA C	ONTROL		•	ORGANIZATION REFOR DOCUMENT RE		DRL NO.	LEVEL NO.:	
					ORGANIZATION RE	SPONSIBI F	DDL NO.:	FILE NO.	
		* . * * * * * * * * * * * * * * * * * *			FOR DOCUMENT DI		552 115		
TYPE OF DOCUMENT: NC	ONTROL	MACTION DREFERENCE		NFORMATION					
USE OF DOCUMENT:	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				ORGANIZATION RE		NO OF	COPIES	
					FOR DOCUMENT	STOWAGE.	10		
		ents of the Voyag							
for the cleanline	ss of fa	brication and test	tare	as and	ESTIMATED MA FOR SINGLE PRE			TION CUTOFF MILESTONE.	
to maintain the r	equired	l quality level in t	these	areas.	TOR SINGLE TRE	IAKATION	DATE OR	WILES TOINE.	
				,	£ ====================================	· · · · · · · · · · · · · · · · · · ·	DATE E	NATA DUE	
INTERRELATIONSHIP WITH C	THER DATA	REQUIREMENTS:			ESTIMATED CO FOR SINGLE PRE	ISI (\$) PARATION:		DATA DUE USER	
MG-009, Plan, I	Manufac	cturing							
QA-009, Plan, (Quality .	Assurance Progra	am		FREQUENCY C	F ISSUE:	PUBLICA	TION DATE	
		eering Specificati			O ANNUALLY	0002.	PUBLICATION DATE.		
	tic Clea				☐ SEMI-ANNUAL	PDR			
,		eering Specificati	ion. C	Cleanliness				(FREQUENCY	
CLASS IFICATION:			,		O MONTHLY OR MILESTONE D SEMI-MONTHLY Through CD			•	
□ SECRET		☐ GROUP I ☐ GROUP 2		ECIAL HANDLING	☐ 81-WEEKLY O WEEKLY			gh CDR	
CONFIDENTIAL SECRET RESTRICTED DA	ATA	O GROUP 3 GROUP 4		SA DISCREET L DISCREET	O DAILY		ESTIMATED EXPIRATION DATE		
CONFIDENTIAL RESTRI			PR	OJECT DISCREET	XX OTHERWISE, AS		EXFINAL	ION DATE	
E ONCLASSII ILD		L) TODEIC DOMAIN	ONO	TOKIN	One time		<u> </u>		
FORM OF DATA: ,		O OF DATA.			REFERENCE DOCL	JMENIS.			
A PRINTED DOCUME	NT	O ABSTRACT		INSTRUCTION					
O CHART		□ BROCHURE		LETTER			•		
O DIAGRAM		D BULLETIN		LIST					
☐ DRAWING ☐ FILM (STATIC OR M	OTION)	O CONTRACT		LOG MANUAL					
☐ ILLUSTRATION	OTION)	☐ DIRECTIVE		MEMORANDUM				*	
□ MODEL		□ DISCLOSURE		MINUTES					
☐ RECORDING (TAPE	OR DISC)	☐ ENGINEERING CHANG	E 🗆	PLAN	APPLICABLE STAN	NDARDS:		· · · · · · · · · · · · · · · · · · ·	
☐ COMPUTER CARD		ORDER	0	PROCEDURE					
O COMPUTER TAPE		☐ REQUEST FOR ENGINE	ER- 🖳	REGULATION					
☐ MICROFILM (W/OR	W/O CARD)	ING CHANGE PROPC	_						
O OTHER		☐ ENGINEERING CHANG		SCHEDULE					
		PROPOSAL		SPECIFICATION					
		☐ HANDBOOK ☐ INDEX		STANDARD VOUCHER					
		G INDEX		VOCCHER					
REVIEWS AND/OR APPROVA	ALS REQUI	RED:							
(LIST IN ORDER OF SUBMI		DRAFT	D	ATE	PREPUBLICATION	PPOOF	1	DATE	
		51011	0.	// L	TREFOREIORITOR	11001	`	7716	
SUBMIT FOR REVIEW TO' -									
_		BY		-			BY		
_									
-				 _					
· -									
CURMIT FOR									
SUBMIT FOR APPROVAL TO	BY .						BY		
	Project	Manager							

PAGE I OF 2

VOYAGER DATA REQUIREMENT DESCRIPTION - 2ND SHEET

SPECIAL INSTRUCTIONS:

required.

ORD NO.: QA - 01

The Quality Appraisal function will define the criteria of the environments for the facilities where hardware will be built, tested, packaged and stored. This criteria will establish limits for cleanliness and handling as required by the customer's contract.

A plan of controlling, auditing, and reporting will be incorporated into the area requirement specifications. A DRD at the subcontractor/vendor level similar in content to this DRD is

SPECIAL DISTRIBUTION. (IF DISTRIBUTION IS NOT COVERED BY AN EXISTING DDL WRITE IN DISTRIBUTION BELOW)

OUTLINE OF CONTENTS:

- 1. Identify area of control.
- 2. Define the levels of control.
 - a. Temperature
 - b. Humidity
 - c. Particle count
 - d. Audit period
 - e. Storage and handling
- 3. Define method of controlling contamination.
 - a. Material, floors, furniture, and tools.
 - b. Clothing, shoes
 - c. Protective clothing
- 4. Maintenance schedules and methods to be used.
- 5. Frequency of measurement of area contamination level.
- **6.** Maintain capability control charts in each area.
- 7. Training of personnel. Information manual.

VOY	'AGER DATA F	REQUIREMENT DESCRIPTION			DRD APPROVED I	BY:	DATE:	CATEGORY CATEGORY	
ORGANIZATION ORIGINATING REQUIREMENT	CODE: QA	OFFICE RESPONSIBLE FOR DE	RD: CODE	DRD PREPA		DATE' 7/28/67	CONTRACT NO.:	DRD NO.: QA-016	
TITLE OF DOCUMENT:	<u> 1 - 5 - 1 1</u>				DRGANIZATION FOR DOCUMENT	RESPONSIBLE PREPARATION	TASK OR SUBTASK	DRL ITEM NO	
RECO:	RD, CAL	JBRATION			ORGANIZATION I FOR DOCUMENT I			LEVEL NO.:	
TYPE OF DOCUMENT			**		ORGANIZATION FOR DOCUMENT		DDL NO.;	FILE NO.	
	CONTROL (DACTION DREFERENCE	Ø INFORN	MATION			, , , , , , , , , , , , , , , , , , , 	ч	
		c computerized rec	-		ORGANIZATION FOR WCUMEN		NO OF	COPIES'	
and confidence	in the ins	spection and test of ng wear patterns a	peratio	ns. A	ESTIMATED FOR SINGLE PR			ION CUTOFF MILESTONE:	
cycles. INTERRELATIONSHIP WITH			~	<u> </u>	ESTIMATED (FOR SINGLE PR			ATA DUE JSER	
	-	Assurance Program	II		FREQUENCY	OF ICCUE			
1 -	dure, Ec	and Gauge Usage quipment Calibratio	on and		□ ANNUALLY □ SEMI-ANNUALLY O QUARTERLY		Pl	DR	
CLASS IFICATION:		☐ GROUP I O GROUP 2	O SPECIAL	HANDLING	☐ 81-MONTHLY ☐ MONTHLY ☐ SEMI-MONTH ☐ 81-WEEKLY	ILY		requency estion	
CONFIDENTIAL SECRET RESTRICTED I O CONFIDENTIAL RESTI	DATA RICTED DATA	O GROUP 3 C GROUP 4 C O PROPRIETARY	D NASA DIS OJPL DIS	SCREET	O WEEKLY O DAILY O THERWISE, As req		ESTIN	MATED ON DATE:	
FORM OF DATA:	KIND	OF DATA:			REFERENCE DO	CUMENTS:			
O PRINTED DOCUM	ENT	O ABSTRACT	☐ INSTE	RUCTION					
O CHART		O BROCHURE	O LETTE	ER .					
DIAGRAM		O BULLETIN	O LIST						
O DRAWING	MOTION)	CATALOG O CONTRACT	X LOG O MANU	141				:	
O FILM (STATIC OR O ILLUSTRATION	WIOTION)	☐ DIRECTIVE		DAL					
O MODEL		O DISCLOSURE	O MINU						
O RECORDING (TAPI	E OR DISC)	O ENGINEERING CHANGE	C PLAN		APPLICABLE STANDARDS.				
O COMPUTER CARD		ORDER	O PROC	EDURE					
O COMPUTER TAPE		☐ REOUEST FOR ENGINEER							
☐ MICROFILM (₩/OF	WU CARD)	ING CHANGE PROPOSAL ☐ ENGINEERING CHANGE	L O REPO SCHE		:				
Historical F	ile	PROPOSAL		IFICATION :					
		O HANDBOOK	O STAN						
		O INDEX	O VOUC	HER					
REVIEWS AND/OR APPRO (LIST IN ORDER OF SUBM	ITTAL)	RED:	DATE		PREPUBLICATION	N PROOF	<u> </u>	ATE	
	J		2.112				D		
SUBMIT FOR REVIEW TO: -									
_		BY					ВҮ		
				_ =					
<u> </u>									
SUBMIT FOR APPROVAL TO		BY					BY		
<u> </u>	Manager,	Quality Assurance	e						
i -								-	

PAGE IOF 2

VOYAGER DATA REQUIREMENT DESCRIPTION - 2ND SHEET

DRD NO.: QA-016

Automatic data processing techniques are utilized by the Instrument Control Section to assure periodic recall of measurement and test equipment for calibration purposes. A DRD at the subcontractor/vendor level similar in content to this DRD is required.

SPECIAL DISTRIBUTION, (IF DISTRIBUTION IS NOT COVERED BY AN EXISTING DDL WRITE IN DISTRIBUTION BELOW)

OUTLINE OF CONTENTS:

SPECIAL INSTRUCTIONS:

The record contains:

- 1. Inventory control number
- 2. Equipment name
- 3. Manufacturer's name
- 4. GE drawing number/model no.
- 5. Serial number
- 6. Range
- 7. Responsible operation
- 8. Responsible custodian
- 9. Last inventory date

- 10. Condition code
- 11. Calibration cycle
- 12. Calibration date (due)
- 13. Present location
- 14. Part number
- 15. Purchase order of instrument
- 16. Listing of repairs made at calibration
- 17. Data points performed at each calibration
- 18. Name **of** personnel performing the calibration

		_		DRD APPROVED	BY:	DATE	DATA CATEGORY:
VOYAGER DATA F	REQUIREMENT DESCRIPTION	l					CATEGORY.
ORGANIZATION ORIGINATING CODE: (OFFICE RESPONSIBLE FOR	DBD. CODE	DRD PREPA	L ARED BY:	DATE'	CONTRACT	DRD NO.
REQUIREMENT QA	OFFICE REOF OROBBEE FOR	DIND. TOODL		Smyth	17/28/67	NO.	C \$A-017
TITLE OF DOCUMENT:			1.1	ORGANIZATION		TASK OR	DRL ITEM
THEE OF BOOOMENT.				FOR DOCUMENT		SUBTASK.	NO
				Quality A	ssurance		
RECORD, SHE	LF LIFE			ORGANIZATION FOR DOCUMENT		DRL NO.	LEVEL NO.
	•	,		TOR DOCUMENT	REPRODUCTION.		
				ORGANIZATION	RESPONSIBLE	DDL NO.:	FILE NO
TYPE OF POSIMENT	england in the constraint of the specimens of the second			FOR DOCUMENT		DDL NO	1122107
	DACTION DREFERENCE	☑ INFORM	IATION				
USE OF DOCUMENT				ORGANIZATION FOR DOCUME		NO OF	COPIES
To control the use of ma				,		1	0
age deterioration and dis	spose of material	whose u	setul	ESTIMATED	MANHOURS		ION CUTOFF
life is expended.				FOR SINGLE P		DATE OR	MILESTONE:
INTERRELATIONSHIP WITH OTHER DATA				ESTIMATED FOR SINGLE F	COST (\$) PREPARATION		ATA DUÉ JSER
QA-009, Plan, Quality A	Assurance Program	m				10 \	JOLIK
RA-009, Plan, Reliabili				FREQUENCY	OF ISSUE:	PUBLICAT	ION DATE.
SE-001, Plan, Engineer	-			☐ ANNUALLY			
SE-016, Specification, I				O QUARTERLY		<u>HD</u>	
SE-028, List, Approved	l Materials			O 81-MONTHLY	Y		FREQUENCY ESTONE)
CLASSIFICATION:	☐ GROUP I	O ODEOIAL	HANDLING	SEMI-MONT BI-WEEKLY	HLY	Maintai	n cur-
O CONFIDENTIAL	GROUP 2 O GROUP 3	O SPECIAL NASA DIS	CREET	☐ WEEKLY ☐ DAILY			u launch MATED
O CONFIDENTIAL RESTRICTED DATA	☐ GROUP 4 ☐ PROPRIETARY	☐ JPL DIS		OTHERWISE	AS SPECIFIED	EXPIRATI	ON DATE:
M UNCLASSIFIED	D PUBLIC DOMAIN	O NOFORN		One tim		<u> </u>	
	OF DATA.	_		REFERENCE DO	CUMENTS:		
☐ PRINTED DOCUMENT ☐ CHART	□ ABSTRACT □ BROCHURE	☐ INSTR					
☐ DIAGRAM	BULLETIN	☐ LIST	.rx				
☐ DRAWING	□ CATALOG	□ LOG					
☐ FILM (STATIC OR MOTION)	□ CONTRACT	☐ MANU					
O ILLUSTRATION	DIRECTIVE	□ MEMO					
☐ MODEL ☐ RECORDING (TAPE OR DISC)	☐ DISCLOSURE ☐ ENGINEERING CHANGE	☐ MINUT	ES	APPLICABLE S	TANDARDS		
COMPUTER CARD	ORDER	□ PROC	EDURE				
O COMPUTER TAPE	☐ REPUEST FOR ENGINEE	R- 🗆 REGU	LATION				
O MICROFILM (\(\psi/OR\) W/O CARD)	ING CHANGE PROPOS						
X OTHER Label	PROPOSAL		DULE FICATION				
<u> </u>	□ HANDBOOK	STANI					
	□ INDEX	□ VOUCH					
25.45.40			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				
REVIEWS AND/OR APPROVALS REQUIR (LIST IN ORDER OF SUBMITTAL)	EU.						
	RAFT			PREPUBLICATIO	N PROOF	D	ATE
SUBMIT FOR REVIEW TO:							
	BY					ВҮ ——	
<u> </u>						-	
· — —							
SUBMIT FOR -	- DV						
APPROVAL TO	BY					BY	
Manager,	Quality Assurance	e					

PAGE I OF 2

VOYAGER DATA REQUIREMENT DESCRIPTION - 2ND SHEET	
SPECIAL INSTRUCTIONS'	DRD NO. QA-01
The control of limited lifetime material is by means of shelf life labels permanently attached to the material. Determination of shelf life is made by reference to the suppliers instruction manual or special instructions supplied with the material or indication of shelf life limitations marked on the material by the Materials and Process Laboratory. A DRD at the subcontractor/vendor level similar in content to this DRD is required.	
SPECIAL DISTRIBUTION (IF DISTRIBUTION IS NOT COVERED BY AN EXISTING, DOL WRITE IN DISTRIBUTION BELOW)	
OUTLINE OF CONTENTS: The shelf lifetime label indicates the following information:	
1. Material part no. and/or nomenclature.	
2. Purchase order number.	
3. Date not to be used after	
4. Temperature storage requirements.	
5. Disposition routine for time date expired material.	

, (CONTINUE ON THIRD SHEET, IF NECESSARY, AND AFFIX TO THIS DRD.)

6. As each label is affixed to the container a permanent record is established for

Date, Type of Material, Released to, Expiration Date of Material,

the material and contains this information:

Disposition of Material, etc.

VOVACES ST	TA DECLUDENCHT DECONORIES			DRD APPROVED B	<i>(</i>	DATE	DATA CATEGORY.
VOYAGER DA	TA REQUIREMENT DESCRIPTION	1					
	E: OFFICE RESPONSIBLE FOR	DRD: CODE	DRD PREPA	RED BY:	DATE	CONTRACT NO.	DRD NO.
REQUIREMENT Q.	A		T. Smy	th	7/28/67	NO.	QA-018
TITLE OF DOCUMENT.	<u> </u>	····		ORGANIZATION RE		TASK OR SUBTASK:	DRL ITEM
				FOR DOCUMENT F	,	SUBINSK.	NO.:
RECORD TOOL	AND GAGE USAGE			ORGANIZATION R		DRL NO.;	LEVEL NO.:
indected, 100L	LIED OF TOLL OF TOLL	•		FOR DOCUMENT R		_ ,	
			4	OBCANIZATION -	ECDONOLO: 5	00: 2:4:	EILE NO.
	<u>Contractory of the support of the s</u>			ORGANIZATION R FOR DOCUMENT D		DDL NO.:	FILE NO.:
TYPE OF DOCUMENT: MICONTROL	DACTION DREFERENCE	□ INFORM	ATION				
USE OF DOCUMENT:		•	1 . 1	ORGANIZATION R FOR DOCUMENT		NO. OF	COPIES:
To assure, by docum measure dimension,					· · · · · · · · · · · · · · · · · · ·	5	
quality characteristic	•			ESTIMATED M			ION CUTOFF
prior to use and perior	•		-	FOR SINGLE PRI	PARATION:	DATE OR	MILESTONE:
continued accuracy.			- :	ESTIMATED C	OST (\$)	DATE D	ATA DUE
INTERRELATIONSHIP WITH OTHER DA	ATA REOUIREMENTS:			FOR SINGLE PRI		TO I	JSER:
MG-001, Drawings,			ixtures			HI	
MG-002, *Drawings,	_			FREQUENCY (OF ISSUE:	PUBLICAT	TON DATE.
QA-004, Manual, Qu	•	_	Ì	O ANNUALLY O SEMI-ANNUAL	.LY		
QA-009, Plan, Quali	ny Assurance Progr	am		QUARTERLY O BI-MONTHLY MONTHLY			FREQUENCY ESTONE)
CLASSIFICATION:	☐ GROUP I	<u></u>	,	O SEMI-MONTHI	_Y	Maințai	n cur-
O SECRET O CONFIDENTIAL	O GROUP 2 O GROUP 3	O NASA DI	HANDLING SCREET	81-WEEKLY		rent thr	u launch MATED
SECRET RESTRICTED DATA CONFIDENTIAL RESTRICTED D.	O GROUP 4 ATA O PROPRIETARY	D JPL DIS	CREET	S OTHERWISE,	S SPECIFIED	EXPIRATI	
© UNCLASSIFIED	O PUBLIC DOMAIN	□ NOFORN	····	DEFENSE SOS	IMENTO:	<u> </u>	
	C ARSTRACT	E NOT	DUCTION	REFERENCE DOC	UMENIS:		
PRINTED DOCUMENT O CHART	O ABSTRACT O BROCHURE	O LETTI					
O DIAGRAM	O BULLETIN	☐ LIST					
O DRAWING	O CATALOG	O LOG					
O FILM (STATIC OR MOTION)	O CONTRACT	□ MANI					
O ILLUSTRATION D MODEL	O DIRECTIVE DISCLOSURE	☐ MINU	DRANDUM TES				
RECORDING (TAPE OR DISC		_		APPLICABLE STA	NDARDS.	- Langer - Langer 	
O COMPUTER CARD	ORDER	O PROC	EDURE				
O COMPUTER TAPE	REPUEST FOR ENGINE						
O MICROFILM (W/OR W/O CAR	,						
O OTHER	ENGINEERING CHANGE PROPOSAL		IFICATION				
	O HANDBOOK	O STAN					
	□ INDEX	O VOUC	HER				
REVIEWS AND/OR APPROVALS RE	OUIRĒD:						
(LIST IN ORDER OF SUBMITTAL)		B.4==		DDEDURE CONT.	DDCC5	=	
	DRAFT	DATE		PREPUBLICATION	PROOF	С	DATE
CUDMIT FOR DEVIEW TO							
SUBMIT FOR REVIEW TO:							
	ВУ					ВҮ	
1							
SUBMIT FOR APPROVAL TO	ВУ					ВΥ	
Mana	ger, Quality Assura	nce					
Ī							

*Key Informal Data PAGE | OF 2

VOYAGER DATA REQUIREMENT DESCRIPTION - 2NO SHEET

SPECIAL INSTRUCTIONS'

DRD NO.: $\mathbf{QA-01}$

The control, identification, and recall of tools and gages are the responsibility of the Quality Appraisal Instrument and Calibration Laboratory. A DRD at the subcontractor/vendor level similar in content to this DRD is required.

SPECIAL DISTRIBUTION: (IF DISTRIBUTION IS NOT COVERED BY AN EXISTING DDL WRITE IN DISTRIBUTION BELOW)

None

OUTLINE OF CONTENTS:

The control, identification and recall capability is by means of a computerized system. The computer cards within this system contain the pertinent information for control.

- 1. I and C lab control number.
- 2. Supplier's identification number and nomenclature.
- 3. Purchase order number and cost.
- 4. Present location.
- 5. Tolerances.
- 6. Date of last calibration.
- 7. Frequency of calibration.
- a. Date of next calibration.

-				DRD APPROVED BY	Y	DATE:	DATA CATEGORY.
VOYAGER DATA	REQUIREMENT DESCRIPTION	l					O AL COOK
ORGANIZATION ORIGINATING CODE:	OFFICE RESPONSIBLE FOR	DRD: CODE	DRD PREPA	ARED BY.	DATE'	CONTRACT	DRD NO.:
RIEQUIREMENT			J.R. G	o ttshall	7/28/67	NO.: TASK OR	DRL ITE
TITLE OF DOCUMENT:	<u> </u>			ORGANIZATION RE		SUBRAGR:	DRINOLTEM
				for document f Quality Assu		,	,
RECORD, TEST				ORGANIZATION R		DRL NO.	LEVEL NO.:
(MATERIALS, P	ARTS, SUB-ASSE	EMBLIES	3)	FOR DOCUMENT R		DIKE NO.	
				ORGANIZ ATIO N R FOR DOCUMENT D		DDL NO.:	FILE NO.:
TYPE OF DOCUMENT: CONTROL	DACTION DREFERENCE	☑ INFORM	IATION				
USE OF DOCUMENT:				ORGANIZATION R FOR DOCUMENT		NO OF	COPIES
To permanently record va	ariable data of tes	ting res	ulte	TOR BOCOWEN	TOWAGE.	10	
of flight hardware.	arrable data di tes	ing res	uits	ESTIMATED M	IANHOURS		ION CUTOFF
of finght hardware.				FOR SINGLE PRI	EPARATION:	DATE OR I	MILESTONE:
				eStimated c	OCT (&)	DATE D	ATA DUE
INTERRELATIONSHIP WITH OTHER DATA				FOR SINGLE PRI			JSER'
QA-009, Plan, Quality A	_						
QA-013, Procedure, Tes	•			FREQUENCY (OF ISSUE:	PUBLICAT	ION DATE
TE-001, Plan, Integrated TE-130, Plan, General T				☐ ANNUALLY ☐ SEMI-ANNUAL	LLY	HE)R
TE-150, I lan, General I	CSt			QUARTERLY DBI-MONTHLY			REQUENCY
SLASSIFICATION:	□ GROUP I			O SEMI-MONTHLY	LY	Not	ESTONE).
SECRET CONFIDENTIAL	GROUP 2 GROUP 3	SPECIAL NASA DI	HANDLING	B1-WEEKLY WEEKLY		applicat	DIE MATED
SECRET RESTRICTED DATA CONFIDENTIAL RESTRICTED DATA		☐ JPL DIS	CREET DISCREET	a daily To otherwise, A	S SPECIFIED	1	ON DATE:
X UNCLASSIFIED	a public domain	NOFORN		4s required		L	
FORM OF DATA: KINI	O OF DATA:			REFERENCE DOC	UMENTS: .		
M PRINTED DOCUMENT	□ ABSTRACT	☐ INSTE					
CHART DIAGRAM	☐ BROCHURE ☐ BULLETIN	☐ LETTI	=K				1
DRAWING	☐ CATALOG	□ LOG			NPC 200	0_2	
Tilm (STATIC OR MOTION)	☐ CONTRACT	☐ MAN	JAL	•	111 C 20	<i>0-2</i>	
☐ ILLUSTRATION ☐ MODEL	☐ DIRECTIVE ☐ DISCLDSURE	☐ MEMO	DRANDUM TES				
☐ RECORDING (TAPE OR DISC)	☐ ENGINEERING CHANGE			APPLICABLE STA	ANDARDS:		
☐ COMPUTER CARD	ORDER	O PROC	EDURE				
COMPUTER TAPE	REQUEST FOR ENGINE						
☐ MICROFILM (₩/OR W/O CARD) ☐ OTHER	☐ ENGINEERING CHANGE						
	PROPOSAL	☐ SPEC	CIFICATION				
	☐ HANDBOOK	□ STAN					
	□ INDEX	□ VOUC	HER				
REVIEWS AND/OR APPROVALS REQU	IRED:						
LIST IN ORDER OF SUBMITTAL)	DRAFT	DATE		PREPUBLICATION	I PROOF	С	DATE
SUBMIT FOR REVIEW TO'							
						ВҮ —	
						-	
SUBMIT FOR	BY					BY	
APPROVAL TO Manager	r, Quality Assuran	ice					
- Tranago	-, -0						

PAGE 10F 2 JPL 2568 OCT 6

GE EXHIBIT DRD QA-019	
VOYAGER DATA REQUIREMENT DESCRIPTION - 2ND SHEET	
special instructions Computer cards will be used for parts data.	DRD NO QA-01:
Preprinted data sheets will be used to record material and subassembly data.	
·	
SPECIAL DISTRIBUTION. (IF DISTRIBUTION IS NOT COVERED BY AN EXISTING DDL WRITE IN DISTRIBUTION BELOW)	

OUTLINE OF CONTENTS:

- **1.** Component name.
- **2.** Œ drawing number with most recent revision.
- 3. Vendor serial number.
- **4.** Vendor's name (not trademark).
- **5.** Vendor's test procedures number and revision.
- 6. The name, make, model number, vendor's identification number and calibration due date of the test equipment, gages or tools used.
- 7. Provisions for signatures of the vendor's and GE responsible representative(s).
- 8. A brief description of each test with a reference to the applicable paragraph in the vendor' test procedure (e.g., input power, continuity, frequency response, etc.).
- 9. Units of measure (e.g., ohms, ma, etc.).
- 10. Tolerances Given in limits, not percent (e.g., 4750-5250 ohms) except where measurement is in percent (e.g., harmonic distortion).
- **11.** Actual readings taken during tests. Do not record as pass or fail unless otherwise specified.
- **12.** Date of tests.
- **13.** Operating time matrix: includes hardware operating and nonoperating time in the testing environments.
- **14.** Identification of environment associated with each set of test readings.
- 15. The number of any failure reporting documents associated with the test. (CONTINUE ON THIRD SHEET, IF NECESSARY, AND AFFIX TO THIS DRD.)

VOYAGER DATA	REOUIREMENT DESCRIPTION		DRD APPROVED	BY:	DATE:	DATA CATEGORY:
					,	DRD NO.:
ORGANIZATION ORIGINATING CODE: REQUIREMENT RA	OFFICE RESPONSIBLE FOR DRD			DATE: 7/28/67	CONTRACT NO.	QA-020
TITLE OF DOCUMENT'		T.F. S	ORGANIZATION		TASK OR	ORL ITEM
			FOR DOCUMENT	PREPARATION.	SUBTASK:	NO.;
*REPORT, FAI	LURE ANALYSIS		Quality A		DDI NOI	LEVEL NO:
			ORGANIZATION FOR DOCUMENT		DRL NO.	LEVEL NO.:
		3	ORGANIZATION FOR DOCUMENT	RESPONSIBLE FOR THE PROPERTY OF THE PROPERTY O	DDL NO.:	FILE NO.:
TYPE OF DOCUMENT: O CONTROL		INFORMATION				
USE OF DOCUMENT. To docume		_	ORGANIZATION FOR WCUME	RESPONSIBLE NT STOWAGE	NO. OF	COPIES:
analysis of a nonconform problem, what caused it					- 9	'
recurrence.	, and what is being us	one to prevent	ESTIMATED FOR SINGLE P			ION CUTOFF
Users: Quality Appraisa	al (FARB) - Reliabili	ty -	TOR STRUCE	ALI BRAITUN.	DAIL ON I	AILLUI ONE.
Design Engineering		-	ESTIMATED			ATA DUE
INTERRELATIONSHIP WITH OTHER DATA QA-009, Plan, Quality A			FOR SINGLE	PREPARATION	TO I	JSER!
QA-021, Report, Noncoi	nforming Material (No			OF ISSUE:	PUBLICAT	ION DATE.
RA-007, *Minutes, Fail	•	Board (FARB)	O ANNOALLI		PD	R
RA-009, Plan, Reliabilit	-		O SEMI-ANNU O OUARTERLY	′	UPDATE (REQUENCY
RA-015, Report, Failure			B 81-MONTHLY O SEMI-MONT		OR MILI	ESTONE):
CLASSIFICATION: O SECRET		SPECIAL HANDLING	O 81-WEEKLY a WEEKLY		Not app	
CONFIDENTIAL SECRET RESTRICTED DATA O CONFIDENTIAL RESTRICTED DAT	O GROUP 4	NASA DISCREET JPL DISCREET PROJECT DISCREET	O DAILY 5 OTHERWISE	E, AS SPECIFIED		AATED ON DATE:
UNCLASSIFIED		NOFORN	As require			
	ID OF DATA:		REFERENCE DO	OCUMENTS;		
PRINTED DOCUMENT CHART		O INSTRUCTION O LETTER				
DIAGRAM		O LIST				
DRAWING		□ LOG				
O FILM (STATIC OR MOTION) O ILLUSTRATION		O MANUAL O MEMORANDUM				
□ MODEL		O MINUTES				
O RECORDING (TAPE OR DISC) O COMPUTER CARD		O PROCEDURE	APPLICABLE S	STANDARDS;		
O COMPUTER TAPE	O REQUEST FOR ENGINEER-					
☐ MICROFILM (₩/OR ₩/O CARD)	,					
O OTHER		SCHEDULE SPECIFICATION				
	☐ HANDBOOK	O STANDARD				
	□ INDEX	O VOUCHER				
REVIEWS AND/OR APPROVALS REQU	JIRED:					
(LIST IN ORDER OF SUBMITTAL)	DRAFT	DATE	PREPUBLICATION	ON PROOF	D	ATE
SUBMIT FOR REVIEW TO'	خابث دار پروساند دیار ایست سدی					<u> </u>
	BY				ВҮ	
					*	
						
SUBMIT FOR				· · · · · · · · · · · · · · · · · · ·		· · · · · · · · · · · · · · · · · · ·
APPROVAL TO	BY	· · · · · · · · · · · · · · · · · · ·			BY	
Manager	r, Quality Assurance				 -	

VOYAGER DATA REQUIREMENT DESCRIPTION - 2ND SHEET DRD NO.: SPECIAL INSTRUCTIONS. QA-02 In Section 3 of the contents, X-rays, pictures, sketches or other descriptive media should be used to completely describe the failure mechanism. A DRD at the subcontractor/vendor level similar in content to this DRD is required. The report will reference a number correlating it to a specific nonconforming material report. SPECIAL DISTRIBUTION. (IF DISTRIBUTION IS NOT COVERED BY AN EXISTING DDL WRITE IN DISTRIBUTION BELOW) **OUTLINE OF CONTENTS:** Description of Failure Symptons - Includes what test the unit failed, under what conditions, the data (or measurement) and when. What Failed - What part, wire, module, bracket, etc., was the actual failure. 2. Analysis Steps - Description of the total steps taken to identify the failure and the **3.** effects of the failure on associated equipment.

(CONTINUE ON THIRD SHEET, IF NECESSARY, AND AFFIX TO THIS DRD.)

Corrective Action -, Whathas been done to prevent reoccurrence of the problem

including reference to the documentation that accomplishes this.

PREPARATION CHICAGON CONTROL GACTION GREENING WITH CONTROL OF CONT)=D =:=:	DECLUDENCE: T. T. T. T. T. T. T. T. T. T. T. T. T.				DRD APPROVED BY	,	DATE	DATA CATEGORY
TITLE OF DOCUMENT: **REPORT, NONCONFORMING MATERIAL (NCMR) **REPORT, NONCONF	VOYAG	∋ER DATA I	REQUIREMENT DESCRIPTION	I					i., ,	JARLOUNT.
TITLE OF DOCUMENT: **REPORT, NONCONFORMING MATERIAL (NCMR) **REPORT, NONCONF	ORGANIZATION ORIGINATING	CODE:	OFFICE RESPONSIBLE FOR	DRD: C	CODE:	DRD PREPA	RED BY:	DATE:		DRD NO.:
#REPORT, NONCONFORMING MATERIAL ##REPORT, NONCONFORMING MATERIAL ##		1 1			-				NO.:	QA-021
*REPORT, NONCONFORMING MATERIAL (NCMR) *REPORT, NONCONFORMING MATERIAL (NCMR) *REPORT, NONCONFORMING MATERIAL (NCMR) *REPORT, NONCONFORMING MATERIAL (NCMR) **REPORT, NONCONFORMING MATERIAL (NCMR) **CREDITION OF CONTROL DACTION DEFFERENCE (INFORMATION OF COMMENT RESPONDED. **CREDITION OF COMMENT INFORMATION OF COMMENT RESPONDED. **CREDITION OF COMMENT INFORMATION RESPONDED. **TOP COMMENT INFORMATI	TITLE OF DOCUMENT	1.623	<u>,</u>		1				TASK OR	
#REPORT, NONCONFORMING MATERIAL (NCMR) ORGANIZATION RESPONSIBLE OR DOCUMENT REPODUCTION ORGANIZATION RESPONSIBLE FOR DOCUMENT REPODUCTION ORGANIZATION RESPONSIBLE ON DOCUMENT REPODUCTION ORGANIZATION RESPONSIBLE FOR DOCUMENT REPODUCTION ORGANIZATION RESPONSIBLE FOR DOCUMENT REPODUCTION ORGANIZATION RESPONSIBLE FOR DOCUMENT REPODUCTION ORGANIZATION RESPONSIBLE FOR DOCUMENT STOWNES A established document to report nonconformance in the fabrication, assembly, inspection and test of hardware. It assigns responsibility for nonconformance, corrective action and disposition of the hardware to rework, MRB, failure analysis. NETERILATIONSHIP WITH OTHER DATA REQUIREMENTS REPODED, Failure Analysis SE-056, Drawings (Category A) for Design Evaluation SE-058. Drawings (Category C) for Test CLASSIFICATION: ORGANIZATION CONTROL CLASSIFICATION: ORGANIZATION CONTROL ORGANIZATION COST (\$) SETIMATED MANUALLY ORGANIZATION COST (\$) SETIMATED	TITLE OF DOCUMENT.							· ·	SUBTASK:	
(NCMR) TYPE OF DOCUMENT: OCONTROL DACTION ORSPERENCE & INFORMATION USE OF DOCUMENT: OCONTROL DATE An established document to report nonconformance in the fabrication, assembly, inspection and test of hardware. It assigns responsibility for nonconformance, corrective action and disposition of the hardware to rework, MRB, failure analysis. NORTH PROPERTY OF THE PROPERTY OF STIME PROPER	4						Quality Ass	urance		
ORGANIZATION RESPONSIBLE ONGANIZATION RESPONSIBLE ON OF COPIES:	t í	NONCO	ONFORMING MAT	ERI/	AL				DRL NO.:	LEVEL NO.:
TYPE OF DOCUMENT: OCONTROL DACTION DREFERENCE INFORMATION USE OF DOCUMENT: An established document to report nonconformance in the fabrication, assembly, inspection and test of hardware. It assigns responsibility for nonconformance, corrective action and disposition of the hardware to rework, MRB, failure analysis. Interentationship with other data redurements: INTERENTATIONSHIP with other data redurements: INTERENTATION OF DATA REDUREMENTS: SE-056, Drawings (Category A) for Design Evaluation SE-058, Drawings (Category C) for Test CASSIFICATION OF DATA OF ROBULE TO GROUP 2 OF ROBUSE TO BENDAMEN OF PROPERTY OF PROPE	(NCMR)						TOR DOCUMENT RE	.FRODUCTION,		*
TYPE OF DOCUMENT: OCONTROL DACTION DREFERENCE INFORMATION USE OF DOCUMENT: An established document to report nonconformance in the fabrication, assembly, inspection and test of hardware. It assigns responsibility for nonconformance, corrective action and disposition of the hardware to rework, MRB, failure analysis. Interrelationship with other data redurements: INTERRELATIONSHIP with other data redurements: INTERRELATIONSHIP with other data redurements: SE-056, Drawings (Category A) for Design Evaluation SE-058, Drawings (Category C) for Test CASSIFICATION OCONTROLITIAL RESTRICTED DATA OCON			o.				ORGANIZATION R	ESPONSIBLE	DDL NO.	FILE NO.:
USE OF DOCUMENT: An established document to report nonconformance in the fabrication, assembly, inspection and test of hardware. It assigns responsibility for nonconformance, corrective action and disposition of the hardware to rework, MRB, failure analysis. RIERRELATIONSHIP WITH OTHER DATA REQUIREMENTS. ROA-0/07, Minutes, Material Review Board (MRB) QA-0/09, Plan, Quality Assurance Program QA-0/00, "Report, Failure Analysis SE-058, Drawings (Category A) for Design Evaluation SE-058, Drawings (Category A) for Design Evaluation SE-058, Drawings (Category A) for Design Evaluation SE-058, Drawings (Category A) for Design Evaluation SE-058, Drawings (Category A) for Design Evaluation SE-058, Drawings (Category A) for Design Evaluation SE-058, Drawings (Category A) for Design Evaluation SE-058, Drawings (Category A) for Design Evaluation SE-058, Drawings (Category A) for Design Evaluation SE-058, Drawings (Category A) for Design Evaluation SE-058, Drawings (Category A) for Design Evaluation SE-058, Drawings (Category A) for Design Evaluation SE-058, Drawings (Category A) for Design Evaluation SE-058, Drawings (Category A) for Design Evaluation SE-058, Drawings (Category A) for Design Evaluation SE-058, Drawings (Category A) for Design Evaluation SECRET REPORTION (Semi-Monthly) SEMI-MONTHLY SEMI-MO	TVDE 05 000 VASVE		·							
An established document to report nonconformance in the fabrication, assembly, inspection and test of hardware. It assigns responsibility for nonconformance, corrective action and disposition of the hardware to rework, MRB, failure analysis. NERERLATIONSHIP WITH OTHER DATA REQUIREMENTS: QA-007, Minutes, Material Review Board (MRB) QA-009, Plan, Quality Assurance Program QA-020, "Report, Failure Analysis SE-056, Drawings (Category A) for Design Evaluation SE-058, Drawings (Category C) for Test CLASSIFICATION: O SCORET ESTRUCTED DATA O CONFIDENTIAL RESTRICTED DATA O CONFIDENTIAL RESTRICTED DATA O CONFIDENTIAL RESTRICTED DATA O CONFIDENTIAL RESTRICTED DATA O CONFIDENTIAL RESTRICTED DATA O DRAWING O DRAWING O DRAWING O DRAWING O DRAWING O DRAWING O DRAWING O DRACTIVE O DRACTIVE O DRACTIVE O MANUALLY O SEMI-AMUNUALLY	Occ.	NTROL	DACTION DREFERENCE	X IN	NFORM	ATION				
fabrication, assembly, inspection and test of hardware. It assigns responsibility for nonconformance, corrective action and disposition of the hardware to rework, MRB, failure analysis. MIERRELATIONSHIP WITH OTHER DATA REQUIREMENTS. QA-009, Plan, Quality Assurance Program QA-020, "Report, Failure Analysis SE-056, Drawings (Category A) for Design Evaluation SE-058, Drawings (Category C) for Test CASSIFICATION. CASSIFICATION. CASSIFICATION. CASSIFICATION. CASSIFICATION. CASSIFICATION. CONTROLOR DATA	1	cument	to report nonconf	form	ance	in the			NO. OF	COPIES.
It assigns responsibility for nonconformance, corrective action and disposition of the hardware to rework, MRB, failure analysis. INTERELATIONSHIP WITH OTHER DATA REQUIREMENTS: QA-007, Minutes, Material Review Board (MRB) QA-009, Plan, Quality Assurance Program QA-020, "Report, Failure Analysis SE-056, Drawings (Category C) for Design Evaluation SE-058, Drawings (Category C) for Test CLASSFICATION: CLASSFICATION: CLASSFICATION: CLASSFICATION: CLASSFICATION: CONFIDENTIAL SCORPT STRICTED DATA CONFIDENTIAL SCORPT STRICTED DATA CONFIDENTIAL CONFIDE			-				,		10)
action and disposition of the hardware to rework, MRB, failure analysis. Matereal Recombens with other data recombenests: QA-007, Minutes, Material Review Board (MRB) QA-009, Plan, Quality Assurance Program QA-020, "Report, Failure Analysis SE-056, Drawings (Category A) for Design Evaluation SF-058, Drawings (Category A) for Design Evaluation SF-058, Drawings (Category C) for Test CLASSIFICATION: CLASSIFICATION: CONPIDENTIAL BESTRICTED DATA OROUP 1 OROUP 2 OROUP 2 OROUP 2 OROUP 3 ORAS DISCRET OROUP 1 OROUP 2 OROUP 3 ORAS DISCRET OROUP 3 OROU	•	•								
Tailure analysis. Candidate Cost (\$) Date data due to user:		•					FOR SINGLE PRE	PARATION:	DATE OR I	VILESTONE:
NOTE THE CATO AND WIND THE DATA REQUIREMENTS: QA-007, Minutes, Material Review Board (MRB) QA-020, "Report, Failure Analysis SE-056, Drawings (Category A) for Design Evaluation SE-058, Drawings (Category C) for Test CLASSIFICATION: O SCORE THIAL: O SCORE THIAL: O SCORE THIAL: O SCORE THIAL: O SCORE THIAL: O COMPLETIAL O PROPRIETARY O PROJECT DISCRET TO NOFORM ON THIAL TO DATE: O COMPLETIAL O BROCHURE O DIAGRAM O BULLETIN O DRAWING O DIAGRAM O BULLETIN O DRAWING O MORPHY O NORTHYLL O O DRAWING O DIAGRAM O BULLETIN O DRAWING O DIAGRAM O BULLETIN O DRAWING O MORPHY O WEEKLY O WEEKLY O WEEKLY O THE WING THE CATO O CONTRACT O MANUAL O DIAGRAM O BULLETIN O DRAWING O DIAGRAM O BULLETIN O DRAWING O MORPHY O NORTHYL O O CONTRACT O MANUAL O DIAGRAM O BULLETIN O DRAWING O DIAGRAM O BULLETIN O DRAWING O MORPHY O WEEKLY O WEEKLY O WEEKLY O WEEKLY O WEEKLY O WEEKLY O WEEKLY O WEEKLY O WEEKLY O THE WEEKLY O THE WING THE CATO O CONTRACT O MANUAL O DIAGRAM O BULLETIN O DRAWING O DIAGRAM O BULLETIN O DRAWING O MORPH O DIAGRAM O BULLETIN O DRAWING O DIAGRAM O BULLETIN O DRAWING O MORPH O NORTHY O WEEKLY O WEEKLY O WEEKLY O WEEKLY O WEEKLY O WEEKLY O WEEKLY O WEEKLY O WEEKLY O WEEKLY O WEEKLY O WEEKLY O WEEKLY O THE WEEKLY O ANNUALLY O CANNUALLY O CONTROL O WEEKLY O WE	*			J ,, O1	,	,				
QA-007, Minutes, Material Review Board (MRB) QA-009, Plan, Quality Assurance Program QA-020, "Report, Failure Analysis SE-056, Drawings (Category A) for Design Evaluation SE-058, Drawings (Category C) for Test CLASSIFICATION: O SECRET O SECRET SETRICTED DATA O CONCIDENTAL POPULATION O ORDUP 4 O CONCIDENTAL PROPERTIES O ORDUP 5 O RECORDING (TAPE OR DISC) O ENGINEERING CHANGE O DECIDENCE O RECORDING (TAPE OR DISC) O ENGINEERING CHANGE O PLAN O DRAWING O CONTRACT O REFERENCE DOCUMENTS. CONTRACT VALVE OR V		HER DATA	REOUIREMENTS:	-, ., ,			ESTIMATED CO FOR SINGLE PRE	ST (\$) PARATION		
QA-020, "Report, Failure Analysis SE-056, Drawings (Category A) for Design Evaluation SE-058, Drawings (Category C) for Test CASSIFICATION: O SECRET O SECRET O SECRET O CONFIDENTIAL O CONFIDENTIAL O SECRET O SEMI-ANNUALLY O SHM-ANNUALLY	QA-007, Minutes,	Mater	rial Review Board	(MR	RB)		<u> </u>			
QA-020, "Report, Failure Analysis SE-056, Drawings (Category A) for Design Evaluation SE-058, Drawings (Category C) for Test CLASSIFICATION: O SECRET O SECRET O SECRET O SECRET O SECRET O SECRET O SECRET O SECRET O SECRET O SECRET O SECRET O SECRET O SECRET O SECRET O SEMM-MONTHLY O MONTHLY	-	•	•	n			FREQUENCY C	F ISSUE:	PUBLICAT	ION DATE:
SE-058, Drawings (Category C) for Test CLASSIFICATION: O SECRET O			•							
SSE-USS, DIAWINGS (Category C) TOT FEST CASSIFICATION: O SECRET O CONFIDENTIAL O	SE-056, Drawing	s (Cate	gory A) for Design	n Eva	alua	tion		LY		
SUBMIT FOR REVIEW TO SECRET RESTRICTED DATA O GROUP 3 O GROUP 4 O GROUP 3 O GROUP 4 O GROUP 3 O GROUP 4	SE-058, Drawing	s (Cate	gory C) for Test							
CONFIDENTIAL DISCRETE RESTRICTED DATA O GROUP 4 O GROUP 7 O GROUP				0.00				Υ		,
O CONFIDENTIAL RESTRICTED DATA Q ONDEDENTIAL RESTRICTED DATA Q OPROPETARY O PROPETARY O PROPETARY O PROPETARY O PROPETARY O PROPETARY O PROPETARY O PROJECT DISCREET A S required A S required REFERENCE DOCUMENTS. CONTRACT O BROCHURE O LETTER O DIAGRAM O BULLETIN O DRAWING O CATALOG O DISCLOSURE O MANUAL O RECORDING (TAPE OR DISC) O RECORDING (TAPE OR DISC) O COMPUTER CARD O REQUEST FOR ENGINEER-O REGULATION O CHART O COMPUTER CARD O REQUEST FOR ENGINEER-O REGULATION O THER O COMPUTER CARD O REQUEST FOR ENGINEER-O REGULATION O THER O COMPUTER CARD O DISCLOSURE O NING CHANGE PROPOSAL O SPECIFICATION O NADADA O NADBOOK O STANDARD O NADADA O NADE O NADATE SUBMIT FOR REVIEW TO BY SUBMIT FOR REPROVAL TO BY BY BY BY BY BY BY BY BY	☐ CONFIDENTIAL		O GROUP 3	O NAS	SA DIS	CREET	O WEEKLY		ESTIN	MATED
FORM OF DATA: KIND OF DATA: X PRINTED DOCUMENT			O PROPRIETARY	O PRO	OJECT		M OTHERWISE, A		EXPIRATI	ON DATE:
CONTRICT O ABSTRACT INSTRUCTION CONTRICT NASA Specifications	₩ UNCLASSIFIED		O PUBLIC DOMAIN	O NOI	FORN				L	
O CHART DIAGRAM DIA	FORM OF DATA:	KIND	OF DATA:							
□ DIAGRAM □ DIAGRAM □ DIAGRAM □ CATALOG □ FILM (STATIC OR MOTION) □ CONTRACT □ MEMORANDUM □ ILLUSTRATION □ DISCLDSURE □ O MEMORANDUM □ ONDDEL □ ODISCLDSURE □ ON MINUTES □ ORECORDING (TAPE OR DISC) □ COMPUTER CARD □ COMPUTER TAPE □ OREQUEST FOR ENGINEER- OREQULATION □ MICROFILM (W/OR W/O CARD) □ OTHER □ OTHER □ DIAGRAM □ O SPECIFICATION □ OTHER □ DIAGRAM □ O SPECIFICATION □ OTHER □ DATE □ OTHER □ DATE □ DATE □ DATE □ DATE □ DATE □ SUBMIT FOR REVIEW TO □ BY SUBMIT FOR REVIEW TO □ SUBMIT FOR APPROVAL TO □ BY □ SUBMIT FOR APPROVAL TO □ BY □ BY □ DATE □ BY □ BY □ BY □ BY □ BY □ BY □ BY □ BY	ł	IT					Contract N	ASA Spec	cification	IS
O DRAWING FILM (STATIC OR MOTION) O CONTRACT O MANUAL ILLUSTRATION O DIRECTIVE O MEMORANDUM O MODEL O DISCLOSURE O MINUTES O RECORDING (TAPE OR DISC) O ENGINEERING CHANGE PLAN COMPUTER CARD ORDER O PROCEDURE COMRUTER TAPE O REQUEST FOR ENGINEER-O REGULATION ING CHANGE PROPOSAL SCHEDULE PROPOSAL O SPECIFICATION OTHER PROPOSAL O SPECIFICATION O HANDBOOK O STANDARD O HANDBOOK O STANDARD O VOUCHER REVIEWS AND/OR APPROVALS REQUIRED: (LIST IN ORDER OF SUBMITTAL) DRAFT DATE PREPUBLICATION PROOF DATE SUBMIT FOR REVIEW TO' BY SUBMIT FOR REVIEW TO' BY SUBMIT FOR APPROVAL TO BY SUBMIT FOR APPROVAL TO BY BY BY BY SUBMIT FOR APPROVAL TO BY SUBMIT FOR APPROVAL TO BY BY BY BY SUBMIT FOR APPROVAL TO BY SUBMIT FOR APPROVAL TO BY SUBMIT FOR BY BY SUBMIT FOR BY BY SUBMIT FOR BY BY SUBMIT FOR BY BY SUBMIT FOR BY BY SUBMIT FOR BY BY SUBMIT FOR BY				_		R :				
FILM (STATIC OR MOTION) O CONTRACT O MANUAL ILLUSTRATION O DIRECTIVE O MEMORANDUM O MODEL O DISCLOSURE O MINUTES O RECORDING (TAPE OR DISC) O ENGINEERING CHANGE D PLAN COMPUTER CARD ORDER O PROCEDURE COMRUTER TAPE O REQUEST FOR ENGINEER- O REGULATION MICROFILM (W/OR W/O CARD) ING CHANGE PROPOSAL ORDER ORDER O THER D ENGINEERING CHANGE D SCHEDULE PROPOSAL O SPECIFICATION O HANDBOOK O STANDARD O INDEX O VOUCHER REVIEWS AND/OR APPROVALS REQUIRED: (LIST IN ORDER OF SUBMITTAL) BY BY SUBMIT FOR REVIEW TO' SUBMIT FOR APPROVAL TO SUBMIT FOR APPROVAL TO BY BY BY BY										
O MODEL O DISCLDSURE O MINUTES O RECORDING (TAPE OR DISC) O ENGINEERING CHANGE D PLAN APPLICABLE STANDARDS: O PROCEDURE COMPUTER CARD O DEBR O PROCEDURE D COMPUTER TAPE O REQUEST FOR ENGINEER-O REGULATION ING CHANGE PROPOSAL REPROPOSAL REPROPOSAL STANDARD OTHER D ENGINEERING CHANGE PROPOSAL O SPECIFICATION O HANDBOOK O STANDARD O INDEX O VOUCHER REVIEWS AND/OR APPROVALS REQUIRED: (LIST IN ORDER OF SUBMITTAL) DRAFT DATE PREPUBLICATION PROOF DATE SUBMIT FOR REVIEW TO BY BY SUBMIT FOR APPROVAL TO BY BY BY		OTION)		0	MANU	JAL				٠
O RECORDING (TAPE OR DISC) O ENGINEERING CHANGE COMPUTER CARD ORDER O PROCEDURE COMPUTER CARD ORDER O PROCEDURE COMPUTER TAPE O REQUEST FOR ENGINEER- O REGULATION ING CHANGE PROPOSAL REPORT COMPUTER TAPE O REQUEST FOR ENGINEER- O REGULATION ING CHANGE PROPOSAL REPORT COMPUTER COMPUTER TAPE O REQUEST FOR ENGINEER- O REGULATION ING CHANGE PROPOSAL REPORT COMPUTER	☐ ILLUSTRATION		O DIRECTIVE	0	МЕМО	RANDUM				
COMPUTER CARD ORDER O PROCEDURE COMRUTER TAPE O REQUEST FOR ENGINEER- O REGULATION MICROFILM (W/OR W/O CARD) ING CHANGE PROPOSAL PROPOSAL O SPECIFICATION O HANDBOOK O INDEX O VOUCHER REVIEWS AND/OR APPROVALS REQUIRED: (LIST IN ORDER OF SUBMITTAL) DRAFT DATE PREPUBLICATION PROOF DATE SUBMIT FOR REVIEW TO' BY SUBMIT FOR APPROVAL TO BY BY SUBMIT FOR APPROVAL TO BY BY BY	İ					ΓES	ADDITION DUE OTAL	IDADDO:		······································
COMRUTER TAPE O REQUEST FOR ENGINEER- O REGULATION MICROFILM (W/OR W/O CARD) ING CHANGE PROPOSAL TO SCHEDULE PROPOSAL O SPECIFICATION O HANDBOOK O INDEX O VOUCHER REVIEWS AND/OR APPROVALS REQUIRED: (LIST IN ORDER OF SUBMITTAL) DRAFT DATE PREPUBLICATION PROOF DATE SUBMIT FOR REVIEW TO' BY SUBMIT FOR APPROVAL BY APPROVAL TO BY BY	·	OR DISC)				EDLIBE	APPLICABLE STAI	NDAKD5.		
MICROFILM (W/OR W/O CARD) ING CHANGE PROPOSAL	i .									
PROPOSAL O SPECIFICATION O HANDBOOK O STANDARD O INDEX O VOUCHER REVIEWS AND/OR APPROVALS REQUIRED: (LIST IN ORDER OF SUBMITTAL) DRAFT DATE PREPUBLICATION PROOF DATE SUBMIT FOR REVIEW TO' BY BY BY BY BY BY		V/O CARD)								
O HANDBOOK O INDEX O VOUCHER REVIEWS AND/OR APPROVALS REQUIRED: (LIST IN ORDER OF SUBMITTAL) DRAFT DATE PREPUBLICATION PROOF DATE SUBMIT FOR REVIEW TO' BY SUBMIT FOR APPROVAL TO BY BY BY	☐ OTHER		☐ ENGINEERING CHANGE		SCHE	DULE				
REVIEWS AND/OR APPROVALS REQUIRED: (LIST IN ORDER OF SUBMITTAL) DRAFT DATE PREPUBLICATION PROOF DATE SUBMIT FOR REVIEW TO' BY BY BY BY BY										
REVIEWS AND/OR APPROVALS REQUIRED: (LIST IN ORDER OF SUBMITTAL) DRAFT DATE PREPUBLICATION PROOF DATE SUBMIT FOR REVIEW TO' BY SUBMIT FOR APPROVAL TO BY BY BY							J			
(LIST IN ORDER OF SUBMITTAL) DRAFT DATE PREPUBLICATION PROOF DATE SUBMIT FOR REVIEW TO' BY SUBMIT FOR APPROVAL TO BY BY	:		O INDEX		7000l	ILIX				
SUBMIT FOR APPROVAL TO DATE PREPUBLICATION PROOF DATE PREPUBLICATION PROOF DATE PREPUBLICATION PROOF DATE PREPUBLICATION PROOF BY BY BY BY			RED:			-				
SUBMIT FOR REVIEW TO' BY BY SUBMIT FOR APPROVAL TO BY BY	(LIST IN ORDER OF SUBMIT		DRAFT	DA	ATE		PREPUBLICATION	PROOF	D	ATE
SUBMIT FOR APPROVAL TO BY BY BY BY										
SUBMIT FOR APPROVAL TO BY BY BY BY	SUBMIT FOR REVIEW TO'		<u> </u>							
SUBMIT FOR APPROVAL TO BY	_		-					· · · · · · · · · · · · · · · · · · ·		<u>.</u>
APPROVAL TO			BY						ВҮ	
APPROVAL TO	<u> </u>		· · · · · · · · · · · · · · · · · · ·							
APPROVAL TO	<i></i>									
APPROVAL TO	_									
			ВУ	***********		-			BY	
		anager	, Quality Assuran	ce						

	·	
VOYAGER DATA REQUII	REMENT DESCRIPTION - 2ND SHEET	
SPECIAL INSTRUCTIONS'	ORD I	
A DRD at the subcontractor/vendor level sin See sample format.	milar in content to this DRD is required.	· ·
	-	
SPECIAL DISTRIBUTION: (IF DISTRIBUTION IS NOT COVERED BY A	AN EXISTING DDL WRITE IN DISTRIBUTION BELOW)	
OUTLINE OF CONTENTS:		
1. Serialized preprinted form.	avanhaa and a aman alatum	
 Description of the hardware by drawing Description of nonconformance and the a Assigning of corrective action to individ 	assignable responsibility.	
5. Disposition recommended:	e. MRB	
b. Return to vendor	E. Accept as is g. Retest	
d. Scrap 6. Approvals required:	z. Retest	
Manufacturing engineering Design engineering		
Quality assurance engineering		

I. NOME	NCLA	TURE			NONC	ONF	ORMAI	ICE I	REPOR	TON		2. INI	TIAT	ED BY	DATE	
3. DWG	PT/G	RREV	AN			W . 5.	SOURCE	INSF	6. REI	F. REP. NO). 7. L	06 17	TEM	8. ENV		
CII#		** · · · · · · · · · · · · · · · · · ·		0.8	.E,			NONE			1			END	ITEM	
9. SERIA	AL NO.	IO. LOT	DWO	II. T.P.	-S.I.	PAI	R. REV.			PE OF TES	3T	13. 1		TIME		
		<u> </u>			··········				1 00	mor.		L==	_ H	R	WIN.	_CYC.
14. DIS	CREPA	ANCY (IN	N-PRO	DCESS)	(FUN	CTIO	NAL)									
	Failı	are Disc	overed	During	Reas	son fo	or Report	Rep	air or D	isposition	Action	Rep	place	ement		
	1.	Bench T	est		1.	Faile	d Item	1.	Repaire	ed in Place	;	1.	Ide	ntical Pa	art	
l		Inspectio	n				Direct	2.	Rep Re	installed		2.	Sul	bstitute F	t.	
		Storage					Expired		Adjuste			3.		ne Neede		
		Shipping Checkou			4.	Othe	r	4. 5.	Elimina Conden			4.	No	t Availab	le	
i		Maintena						6.	Held fo							
		Mfr. Te						7.	Depot R	Rep.						
į		Operatio Qual	n					8.	Failure	Analysis						
15. INI		DISPO	SITIO	N												
			-		:		·						,	•=		
If CO	RREC.	TIVE A	CTION	(TO	AVOID	REC	URRENC	(F)		************	<u> </u>					
	TITLE	1172 70		(10 /												· · · · · · · ·
	 		·	 						 						
IB. CL	19. R	RECD IN	SP. R	EJ 20.	PC 🌣	ODE	21. SHIP	NOTI	CE 22.	VEND. \$	HOP/L	OCA	TIO	N .		
	1								-						T	
23. SH	OP OF	RDER NO)	24	PRO). C(ONT	DAT	E 25	PURCHA	SING [DATE	26			AUSE CO.
28, AS	REOD).	DATE	A	DISP.	AUTI	HORITY	DAT	Е Ο.	-	DA	TE	7 u	MRB <i>₩</i>	30. F	A NO.
3 1. AS	REQE).	DATE	В,				DAT	E E.		DA	TE	32.	ARB		DATE
33. AS	REOD).	DATE	С	<u> </u>			DAT	E F.		DA	ΤE	34.	CONT.	ON PO	Э.

Nonforming Material Report

VOYA	AGER DATA	REQUIREMENT DESCRIPTION			DRD APPROVED	BY	DATE:	DATA CATEGORY
ORGANIZATION ORIGINATING REQUIREMENT.	CODE: QA	OFFICE RESPONSIBLE FOR DRD	: CODE:	DRD PREF	ARED BY: Smyth	DATE: 7/28/67	CONTRACT NO.:	DRD NO.: QA-022
*REPORT, PI	<u> </u>	S TRENDS	1		ORGANIZATION FOR DOCUMENT Quality A	PREPARATION: SSURANCE RESPONSIBLE	TASK OR SUBTASK: DRL NO.:	DRL ITEN NO.:
		,			ORGANIZATION		DDL NO.:	FILE NO
TYPE OF DOCUMENT:					FOR DOCUMENT	DISTRIBUTION:		
USE OF DOCUMENT:	ONTROL	DACTION DREFERENCE X	INFORM	IATION	ORGANIZATION	RESPONSIBLE	NO OF	COPIES
To detect nonconf		e trends at receiving, ly and test to identify			FOR DOCUME	ENT STOWAGE.	1.	5
		ely corrective action			ESTIMATED FOR SINGLE F	MANHOURS PREPARATION	_	TON CUTOFF MILESTONE
	turing S	Standing Instructions	•	s)	ESTIMATED FOR SINGLE	COST (\$) PREPARATION		ATA DUE USER'
		rial Review Board (M	RB)		FREQUENC	Y OF ISSUE:	PUBLICAT	TION DATE:
_	•	Assurance Program Informing Material (NO	CMR))	☐ ANNUALLY☐ SEMI-ANNU☐ QUARTERLY☐ BI-MONTHL	′	UPDATE (I	HDR FREQUENCY
CLASSIFICATION: SECRET CONFIDENTIAL				HANDLING	MONTHLY SEMI-MON S1-WEEKLY WEEKLY	THLY	Throug	Γ
SECRET RESTRICTED D CONFIDENTIAL RESTR MUNCLASSIFIED		GROUP 4 D PROPRIETARY D F	NASA DI: JPL DIS PROJECT NOFORN		O DAILY OTHERWIS	E,AS SPECIFIED		MATED ION DATE
FORM OF DATA:	KIN	D OF DATA.			REFERENCE DO	OCUMENTS:		
M PRINTED DOCUME	ENT	-	🗖 INSTI	RUCTION	NPC	200-2		
☐ CHART ☐ DIAGRAM			□ LIST	LK				
□ DRAWING			LOG					
☐ FILM (STATIC OR N	MOTION)		□ MAN					
☐ ILLUSTRATION		_	_	DRANDUM				
MODEL TABLE	OD DIGO)		□ MINU □ PLAN		APPLICABLE S	STANDARDS		
☐ RECORDING (TAPE☐ COMPUTER CARD☐ COMPUTER TAPE☐	OR DISC)		□ PROC	EDURE	NI I EIONBLE C	THINDHINDO		
☐ MICROFILM (W/OR	W/O CARD)	-						
O OTHER		☐ ENGINEERING CHANGE	SCHE					
			STAN					
REVIEWS AND/OR APPROV						4%		
(· · · · · · · · · · · · · · · · · · ·	DRAFT	DATE		PREPUBLICATION	ON PROOF	С	DATE
SUBMIT FOR REVIEW TO' -				_				
_ _		ВУ		<u> </u>			ВҮ	
-				_				
SUBMIT FOR APPROVAL TO		BY		_			вү	
<u> </u>	Manage	r, Quality Assurance	;	_				

VOYAGER DATA REQUIREMENT DESCRIPTION - 2ND SHEET
The Process Control Engineer performs a daily review of all NCM reports and interfaces with Engineering, Manufacturing Planning and Supervision, Quality Assurance to determine assignables for defects and corrective action. Trend charts are maintained weekly from these determinations.
E
SPECIAL DISTRIBUTION: (IF DISTRIBUTION IS NOT COVERED BY AN EXISTING DDL WRITE IN DISTRIBUTION BELOW)
 OUTLINE OF CONTENTS: The Nonconforming Material Reports are developed into trend charts for each area of manufacturing, inspection, test and assembly. Each area is broken down into the major elements of activity, and trend charts are plotted with established control limits (upper and lower). Responsibility for corrective action on nonconformance is assigned to Manufacturing, Engineering and Quality Assurance and each function is measured by the trend charts. Trend charts and records are maintained on all operators and inspectors to measure performance and determine needs for additional training.
5. A summary of corrective action status is made each week to supplement the trend charts.

ORGANIZATION ORIGINATING REQUIREMENT DESCRIPTION ORGANIZATION ORIGINATING REQUIREMENT ORGANIZATION ORIGINATING RESPONSIBLE FOR DRD: CODE: DRD PREPARED BY: DATE: CONTRACT NO.: T. F. Smyth 7/28/67 FOR DOCUMENT: SUBTASK OR SUBTASK OFFICE RESPONSIBLE FOR DRD: CODE: DRD PREPARED BY: DATE: CONTRACT NO.: ORGANIZATION RESPONSIBLE TASK OR SUBTASK OFFICE	1014	YED DATA :	DECLUDEMENT DECORPOSION		DRD APPROVED BY	' ;	DATE:	DATA CATEGORY:	
TITLE OF DODUMENT: **REPORT, QUALITY AUDIT*	VOYAG	EK DATA F	KEQUIKEMENT DESCRIPTION	. <u> </u>					
TITLE OF DOCUMENT: .*REPORT, QUALITY AUDIT **REPORT, QUALITY AUDIT*		CODE:	OFFICE RESPONSIBLE FOR D	ORD: CODE:	DRD PREPA	ARED BY:	DATE:		DRD NO.:
REPORT, QUALITY AUDIT **REPORT, QUALITY AUDIT **REPORT, QUALITY AUDIT *REPORT, QUALITY AUDIT ***REPORT, QUALITY AUDIT ****PREPORT, QUALITY AUDIT ***********************************	REQUIREMENT.	QA			T. F. S	myth	7/28/67	NU	QA-023
**REPORT, QUALITY AUDIT **STANTED DOUBLET TO MANUAL AUDIT AUD	TITLE OF DOCUMENTS	1 464.4				ORGANIZATION PE	SPONSIBLE		
**REPORT, QUALITY AUDIT **REPORT, QUALITY AUD	TITLE OF DOCUMENT.					PER BUTUMENS S	HEPAROEN:		I EIVI
TYPE OF COOLUMENT: O CONTROL DACTION DREFERENCE REPORTMENTS: TO measure the level of compliance to the established Quality Assurance Operating Procedures and Manufacturing Standing Instructions and to implement corrective action as necessary. INTERRELATIONSHIP WITH OTHER DATA REQUIREMENTS: QA-009, Plan Quality Assurance Program QA-021, Report, Nonconforming Material (NCMR) CLASSIFICATION SECRET QA-009, Plan Quality Assurance Program QA-021, Report, Nonconforming Material (NCMR) CLASSIFICATION SECRET QA-009, Plan Quality Assurance Program QA-021, Report, Nonconforming Material (NCMR) CLASSIFICATION SECRET QA-009, Plan Quality Assurance Program QA-021, Report, Nonconforming Material (NCMR) CLASSIFICATION SECRET QA-009, Plan Quality Assurance Program QA-021, Report, Nonconforming Material (NCMR) SEMI-MONTHLY SEMI-MON						OGANIZATIONS	ispansurle	DRL NO.	LEVEL NO
TYPE OF DOCUMENT: O CONTROL DACTION DREFERENCE DIRECTIONS OF CONTROL DACTION DREFERENCE DIRECTIONS OF CONTROL DACTION DREFERENCE DIRECTIONS OF CONTROL DACTION DREFERENCE DIRECTIONS OF CONTROL DACTION DREFERENCE DIRECTIONS OF CONTROL DATE	.*REPOR	Τ, QU	ALITY AUDIT					DRL NO.	LEVEL NO.:
TYPE OF DOCUMENT: OSCIPTION: OSE OF DOCUMENT: TO measure the level of compliance to the established Quality Assurance Operating Procedures and Manufactur ing Standing Instructions and to implement corrective action as necessary. INTERRELATIONSHIP With OTHER DATA REQUIREMENTS QA-009, Plan Quality Assurance Program QA-021, Report, Nonconforming Material (NCMR) CLASSIFICATION: OSCRETI SETRICTED DATA OSCRETI RESTRICTED DATA OSCRET		-							l .
TYPE OF DOCUMENT: OSCIPTION: OSE OF DOCUMENT: TO measure the level of compliance to the established Quality Assurance Operating Procedures and Manufactur ing Standing Instructions and to implement corrective action as necessary. INTERRELATIONSHIP With OTHER DATA REQUIREMENTS QA-009, Plan Quality Assurance Program QA-021, Report, Nonconforming Material (NCMR) CLASSIFICATION: OSCRETI SETRICTED DATA OSCRETI RESTRICTED DATA OSCRET						<u> </u>	<u></u>	<u> </u>	L
Type of document: Occument								DDL NO	FILE NO
USE OF DOCUMENT: TO measure the level of compliance to the established Quality Assurance Operating Procedures and Manufacturing Standing Instructions and to implement corrective action as necessary. MITERRELATIONSHIP WITH OTHER DATA REQUIREMENTS: QA-009, Plan Quality Assurance Program QA-021, Report, Nonconforming Material (NCMR) CLASSIFICATION: O GROUP 1 SECRET O SECRET RESTRICTED DATA O GROUP 2 O GROUP 2 O GROUP 3 O GROUP 3 O GROUP 4 O GROUP 4 O GROUP 4 O GROUP 5 O GROUP 5 O GROUP 5 O GROUP 6 O GROUP 7 O GROUP 7 O GROUP 7 O GROUP 7 O GROUP 8 O GROUP 9 O GROUP 9 O GROUP 9 O GROUP 9 O GROUP 1 O GROUP 9 O GROUP 9 O GROUP 9 O GROUP 1 O GROUP 9 O GROUP 1 O GROUP 9 O GROUP 1 O GROUP 9	TYPE OF DOCUMENT: O.C.	NTDOL	DACTION DESERVE	5 INFORM	AATION	FOR DOCUMENT O	STRIBUTION.		
To measure the level of compliance to the established Quality Assurance Operating Procedures and Manufacturing Standing Instructions and to implement corrective action as necessary. INTERRELATIONSHIP WITH OTHER DATA REQUIREMENTS: QA-009, Plan Quality Assurance Program QA-021, Report, Nonconforming Material (NCMR) CLASSIFICATION: SECRET STRICTED DATA SECRET STRICTED DATA SOCRET STRICTED DATA CORRESPONDED CORRESPONDED DATA CORRESPONDED CORR	000	WINUL I	DAUTION DREFERENCE	M INLOKI	VIATION	ORGANIZATION R	ESPONSÍBI F	NO OF	COPIES"
Quality Assurance Operating Procedures and Manufacturing Standing Instructions and to implement corrective action as necessary. INTERRELATIONSHIP WITH OTHER DATA REQUIREMENTS: QA-009, Plan Quality Assurance Program QA-021, Report, Nonconforming Material (NCMR) CLASSIFICATION CLASSIFICATION CROPP 2 OGROUP 1 OGROUP 2 OGROUP 2 OGROUP 3 OGROUP 1 OGROUP 3 OGROUP 3 OGROUP 1 OGROUP 4 OGROUP 4 OGROUP 4 OGROUP 5 OGROUP 1 OGROUP 5 OGROUP 1 OGROUP 1 OGROUP 1 OGROUP 1 OGROUP 1 OGROUP 1 OGROUP 2 OGROUP 1 OGROUP 1 OGROUP 1 OGROUP 1 OGROUP 1 OGROUP 1 OGROUP 1 OGROUP 1 OGROUP 1 OGROUP 1 OGROUP 1 OGROUP 1 OGROUP 1 OGROUP 1 OGROUP 1 OGROUP 1 OGROUP 1 OGROUP 1 OGROUP 2 OGROUP 1 OGROUP 1 OGROUP 1 OGROUP 1 OGROUP 1 OGROUP 1 OGROUP 1 OGROUP 1 OGROUP 1 OGROUP 1 OGROUP 1 OGROUP 1 OGROUP 2 OGROUP 1 OGROUP 2 OGROUP 1 O		1 -	n ge						
INTERRELATIONS and to implement corrective action as necessary. INTERRELATIONSHIP WITH OTHER DATA REQUIREMENTS: QA-009, Plan Quality Assurance Program QA-021, Report, Nonconforming Material (NCMR) ESTIMATED COST(\$) DATE DATA DUE TO USER. CLASSIFICATION: GROUP 1 GROUP 2 GROUP 3 GROUP 4 GROUP 4 GROUP 4 GROUP 5 GROUP			-]	LO
INTERRELATIONSHIP WITH OTHER DATA REQUIREMENTS: QA-009, Plan Quality Assurance Program QA-021, Report, Nonconforming Material (NCMR) CLASSIFICATION: GEORGET GEOR	•	_	_			•		-	
INTERRELATIONSHIP WITH OTHER DATA REQUIREMENTS: QA-009, Plan Quality Assurance Program QA-021, Report, Nonconforming Material (NCMR) CLASSIFICATION: GENERAL OF GROUP 2 OF SPECIAL HANDLING OF CONFIDENTIAL	ing Standing Inst	ruction	s and to implemen	t corre	ctive	FOR SINGLE PRE	PARATION:	DATE OR	MILESTONE:
NETERRELATIONSHIP WITH OTHER DATA REQUIREMENTS: QA-009, Plan Quality Assurance Program QA-021, Report, Nonconforming Material (NCMR) CLASSIFICATION: CLASSIFICATION: CLASSIFICATION: CLASSIFICATION: CLASSIFICATION: O GROUP 2 O GROUP 2 O GROUP 2 O GROUP 3 O GROUP 2 O GROUP 3 O GROUP 3 O GROUP 4 O GROUP 3 O GROUP 4 O GROUP 3 O GROUP 3 O GROUP 4 O GROUP 3 O GROUP 3 O GROUP 4 O GROUP 3 O GROUP 4 O GROUP 3 O GROUP 4 O GROUP 3 O GROUP 4 O GROUP 3 O GROUP 4 O GROUP 3 O GROUP 4 O GROUP 3 O GROUP 4 O GROUP 3 O GROUP 4 O GROUP 3 O GROUP 4 O GROUP 3 O GROUP 4 O GROUP 3 O GROUP 4 O GROUP 3 O GROUP 4 O GROUP 3 O GROUP 4 O GROUP 3 O GROUP 4 O GROUP 3 O GROUP 4 O GROUP 3 O GROUP 4 O GROUP 3 O GROUP 4 O GROUP 3 O GROUP 3 O GROUP 4 O GROUP 4 O GROUP 5 O GROUP 4 O GROUP 5 O GROUP 5 O GROUP 4 O GROUP 5 O GROUP 4 O GROUP 5 O GROUP 5 O GROUP 6 O GROUP 7 O GROUP 7 O GROUP 7 O GROUP 7 O GROUP 7 O GROUP 7 O GROUP 7 O GROUP 7 O GROUP 7 O GROUP 7 O GROUP 8 O GROUP 9 O HANDLING O HARMSERIC CHARGE O DATE O DATE O DATE O DATE O DIAGRAM O BULLETIN O DIAGRAM O BULLETIN O DIAGRAM O BULLETIN O DIAGRAM O BULLETIN O DIAGRAM O DIRECTIVE O MEMORANDON O MICROFILM (WYOR WO CARD) O GROUP 9 O GROUP 9 O GROUP 9 O GROUP 9 O HANDLING O HANDLING O GROUP 9 O HANDLING O HANDLING O GROUP 9 O HANDLING O HANDLING O HANDLING O HANDLING O HANDLING O GROUP 9 O HANDLING O H	action as necessa	ary.							
QA-009, Plan Quality Assurance Program QA-021, Report, Nonconforming Material (NCMR) QA-021, Report, Nonconforming Material (NCMR) FREQUENCY OF ISSUE. SMILL ALLY PUBLICATION DATE	INTERRELATIONISHID WITH OT	HED DATA	DECI IDEMENTS:					•	
QA-021, Report, Nonconforming Material (NCMR) CASSIFICATION:						TOR SINGLE PRE	. ANATION		JULIN.
CLASSIFICATION: CLASSIFICATION: CL	_		_		D)	EDECHIENCY (F ISSUE	DIDITOAT	ION DATE
CLASSIFICATION: SECRET O GROUP 1 O SPECIAL HANDLING O SECRET O SEMENTHY O SEMI-MONTHLY ON THE WEEKLY OF THE WEEKLY ON THE WEEKLY OF THE WEEKLY ON THE WEEKLY OF THE WEEKLY ON THE WEEKLY OF THE WEEKLY ON THE WEEKL	QA-021, Report,	nonco	omorming Material	i (NCM	K)				
CLASSIFICATION: SECRET SECRET O GROUP O						8 ANNUALLY 8 SEMI-ANNUAL	LY.	HL	Ж ————
CLASSIFICATION: SECRET O CONFIDENTIAL O SECRET O O GROUP 1 O GROUP 3 O GROU						QUARTERLY EI-MONTHLY			
SECRET O COMPIDENTIAL O COMPORTIAL O COMPORTIAL O SECRET RESTRICTED DATA O COMPORTIAL COMPORTIAL RESTRICTED DATA O COMPORTIAL O SECRET RESTRICTED DATA O COMPORTIAL C						☐ MONTHLY	Υ	•	,
O CONFIDENTIAL O SECRET RESTRICTED DATA O SECRET RESTRICTED DATA O SECRET RESTRICTED DATA O SECRET RESTRICTED DATA O SECRET RESTRICTED DATA O SECRET RESTRICTED DATA O SECRET DO DESCRIPTION O SECRET O PROJECT DISCREET O PRO				O SPECIAL	HANDLING	O BI-WEEKLY			
CONFIDENTIAL RESTRICTED DATA OPROPRIETARY OP	O CONFIDENTIAL	ΓΑ	O GROUP 3	O NASA D	SCREET	☐ DAILY		ESTI	MATED
FORM OF DATA: KIND OF DATA: © PRINTED DOCUMENT O ABSTRACT O INSTRUCTION O CHART D BROCHURE O LETTER O DIAGRAM O BULLETIN O LIST O DIAGRAM O BULLETIN O LIST O FILM (STATIC OR MOTION) O CATALOG O LOG O FILM (STATIC OR MOTION) O CONTRACT MANUAL O ILLUSTRATION O DIRECTIVE MEMORANDUM ODEL DISCLOSURE O MINUTES DESCORDING (TAPE OR DISC) O COMPUTER CARD ORDER OPCOEURE O COMPUTER CARD ORDER OPCOEURE O COMPUTER TAPE REQUEST FOR ENGINEER- REGULATION O MICROFILM (WYOR WO CARD) O OTHER SOME OF SUBMITTAL) REVIEWS AND/OR APPROVALS REQUIRED: (LIST N ORDER OF SUBMITTAL) BY SUBMIT FOR REVIEW TO: BY BY BY BY BY	☐ CONFIDENTIAL RESTRIC		O PROPRIETARY	O PROJECT	T DISCREET	OTHERWISE,A	S SPECIFIED	EXPIRATI	ON DAIL.
GRAPH FORM OF DATA: KIND OF DATA: NPC 200-2 NPC 200-	AJ UNCLASSIFIED		O PORFIC DOWNIN	U NOFORN	- · · · · · · · · · · · · · · · · · · ·	DEEEDENOE DOO!	IMENTO	<u> L</u>	
O CHART O DIAGRAM O BULLETIN O LIST O DRAWING O CATALOG O FILM (STATIC OR MOTION) O CINTRACT MANUAL O ILLUSTRATION O DIRECTIVE MEMORANDUM MODEL BISCLOSURE O MINUTES RECORDING (TAPE OR DISC) O COMPUTER CARD O MICROFILM (W/OR WO CARD) O OTHER ENGINEERING CHANGE PLAN O OTHER ENGINEERING CHANGE PROPOSAL REPORT O OTHER ENGINEERING CHANGE STANDARD O OTHER SUBMIT FOR REVIEW TO. BY BY SUBMIT FOR APPROVALS REVIEW TO. BY BY BY BY BY BY BY BY BY B						REFERENCE DOC	DINIEIN I 9:		
O DIAGRAM O BULLETIN O DIAGRAM O DIAGRAM O DIAGRAM O DIAGRAM O DIAGRAM O DIAGRAM O DIRECTIVE MANUAL O ILLUSTRATION O DIRECTIVE MEMORANDUM MODEL D DISCLOSURE O MINUTES RECORDING (TAPE OR DISC) O COMPUTER CARD O COMPUTER CARD O COMPUTER TAPE REQUEST FOR ENGINEER: O MICROFILM (W/OR WO CARD) O OTHER PROPOSAL STANDARD O OTHER PROPOSAL O SPECIFICATION HANDBOOK STANDARD O VOUCHER REVIEWS AND/OR APPROVALS REQUIRED: (LIST N ORDER OF SUBMITTAL) DRAFT BY SUBMIT FOR REVIEW TO: BY BY BY BY BY BY BY BY	<i>?</i>	IT				NPC 200 2			
O DRAWING O FILM (STATIC OR MOTION) O CONTRACT O ILLUSTRATION O DIRECTIVE O MANUAL O ILLUSTRATION O DIRECTIVE O MEMORANDUM O MODEL O DISCLOSURE O MINUTES O COMPUTER CARD O COMPUTER TAPE O MICROFILM (W/OR W/O CARD) O OTHER O OTHER O OTHER O OTHER O DISCLOSURE O PROCEDURE O COMPUTER TAPE O REQUEST FOR ENGINEER- O REQUEST FOR ENGINEER- O MICROFILM (W/OR W/O CARD) O OTHER O OTHER O DINDEX O VOUCHER REVIEWS AND/OR APPROVALS REQUIRED: (LIST N ORDER OF SUBMITTAL) DRAFT DATE BY SUBMIT FOR REVIEW TO: SUBMIT FOR APPROVAL TO BY BY BY BY					ER	111 0 200-2			
O FILM (STATIC OR MOTION) O ILLUSTRATION O ILLUSTRATION O DIRECTIVE MEMORANDUM MODEL DISCLOSURE O MINUTES RECORDING (TAPE OR DISC) ENGINEERING CHANGE PLAN O COMPUTER CARD O COMPUTER TAPE O MICROFILM (W/OR WO CARD) O OTHER ENGINEERING CHANGE PROPOSAL REQUEST FOR ENGINEER- REQUEST FOR ENGINEER- O SPECIFICATION HANDBOOK STANDARD INDEX O VOUCHER REVIEWS AND/OR APPROVALS REQUIRED: (LIST N ORDER OF SUBMITTAL) DRAFT DATE PREPUBLICATION PROOF DATE SUBMIT FOR REVIEW TO: SUBMIT FOR APPROVAL TO SUBMIT FOR APPROVAL TO BY BY BY									
O ILLUSTRATION O DIRECTIVE MEMORANDUM MEMORANDUM MEMORANDUM DISCLOSURE MEMORANDUM DISCLOSURE O MINUTES RECORDING (TAPE OR DISC) ENGINEERING CHANGE PLAN APPLICABLE STANDARDS: APPLICABLE STANDARDS:		NAOIT			ΙΙΔΙ				
MODEL DISCLOSURE O MINUTES RECORDING (TAPE OR DISC) ENGINEERING CHANGE PLAN APPLICABLE STANDARDS: O COMPUTER CARD ORDER O PROCEDURE O COMPUTER TAPE REQUEST FOR ENGINEER- REGULATION ING CHANGE PROPOSAL TO SCHEDULE PROPOSAL O SPECIFICATION O OTHER DISCINEERING CHANGE O SPECIFICATION DINDEX O VOUCHER REVIEWS AND/OR APPROVALS REQUIRED: (LIST N ORDER OF SUBMITTAL) DRAFT DATE PREPUBLICATION PROOF DATE SUBMIT FOR REVIEW TO: BY BY BY BY BY BY BY BY	1	7.10N)							
RECORDING (TAPE OR DISC)									
O COMPUTER CARD ORDER O PROCEDURE O COMPUTER TAPE REQUEST FOR ENGINEER- REQUIATION O MICROFILM (W/OR W/O CARD) ING CHANGE PROPOSAL REPORT O OTHER PROPOSAL O SPECIFICATION HANDBOOK STANDARD INDEX O VOUCHER REVIEWS AND/OR APPROVALS REQUIRED: (LIST N ORDER OF SUBMITTAL) DRAFT DATE PREPUBLICATION PROOF DATE SUBMIT FOR REVIEW TO: BY SUBMIT FOR APPROVAL TO BY BY BY BY BY		OR DISC)				APPLICABLE STA	NDARDS:		
O MICROFILM (W/OR W/O CARD) ING CHANGE PROPOSAL REPORT O OTHER	1		ORDER	O PRO	CEDURE				
O OTHER	O COMPUTER TAPE		☐ REQUEST FOR ENGINEE	R- 🗖 REGI	JLATION				
PROPOSAL O SPECIFICATION HANDBOOK STANDARD O VOUCHER REVIEWS AND/OR APPROVALS REQUIRED: (LIST N ORDER OF SUBMITTAL) DRAFT DATE BY SUBMIT FOR REVIEW TO: BY BY BY BY BY BY BY BY	O MICROFILM (W/OR V	V/O CARD)							
REVIEWS AND/OR APPROVALS REQUIRED: (LIST N ORDER OF SUBMITTAL) DRAFT DATE PREPUBLICATION PROOF DATE SUBMIT FOR REVIEW TO: BY SUBMIT FOR APPROVAL TO BY BY BY BY	O OTHER								
REVIEWS AND/OR APPROVALS REQUIRED: (LIST N ORDER OF SUBMITTAL) DRAFT DATE PREPUBLICATION PROOF DATE SUBMIT FOR REVIEW TO: BY SUBMIT FOR APPROVAL TO BY BY BY BY									
REVIEWS AND/OR APPROVALS REOUIRED: (LIST N ORDER OF SUBMITTAL) DRAFT DATE PREPUBLICATION PROOF DATE SUBMIT FOR REVIEW TO: BY SUBMIT FOR APPROVAL TO BY BY BY									
(LIST N ORDER OF SUBMITTAL) DRAFT DATE PREPUBLICATION PROOF DATE SUBMIT FOR REVIEW TO: BY SUBMIT FOR APPROVAL TO BY BY BY BY			□ INDEX	J 7000	JI IEN				
SUBMIT FOR REVIEW TO: BY BY BY BY BY BY BY BY BY B			RED:						
SUBMIT FOR REVIEW TO: BY BY BY BY BY BY BY	(LIST N ORDER OF SUBMIT	,	DRAFT	DATE		PREPUBLICATION	PROOF	Г	ATE
SUBMIT FOR APPROVAL TO BY BY BY BY BY BY		ı	DIV (I	D.11L		SELISATION		L	
SUBMIT FOR APPROVAL TO BY BY BY BY BY BY	L OUDMIT FOR DEVICE TO								
SUBMIT FOR APPROVAL TO BY	PORMIT FOR KENEM IO: -								
APPROVAL TO	_		ВҮ					BY	
APPROVAL TO	-								
APPROVAL TO	-				- -				
APPROVAL TO	_								
APPROVAL TO	CLIDMIT FOR								
			BY					BY	
		Ianage:	r, Quality Assuran	nce					<u>_</u> _

*Key Informal Data

PAGE I OF 2

CE EXTENSI DIO (11 023	
VOYAGER DATA REQUIREMENT DESCRIPTION - 2ND SHEET	
SPECIAL INSTRUCTIONS:	DRD NO.: QA-02{
	QA-020
DELOW)	
SPECIAL DISTRIBUTION. (IF DISTRIBUTION IS NOT COVERED BY AN EXISTING DDL WRITE IN DISTRIBUTION BELOW)	
OUTLINE OF CONTENTS:	
 Name of area or operation, date of audit, audited by	
3. Results of audit and recommendation for correction and/or improvement.	
4. Assign responsibility for correction and/or improvement.	
5. Establish completion dates for correction/improvement.	
6. Reschedule audit period.	

VOYAG	ER DATA	REQUIREMENT DESCRIPTION			DRD APPROVED I	ВҮ	DATE.	DATA CATEGORY:
ORGANIZATION ORIGINATING REQUIREMENT.	CODE: QA	OFFICE RESPONSIBLE FOR	DRD: COD	1	Smyth	DATE: 7/28/67 '	CONTRACT NO.:	DRD NO.: QA-024
TITLE OF DOCUMENT:	<u> </u>	Market Control of the	-,		ORGANIZATION F	PREPARATION:	TASK OR SUBTASK:	DRL ITEM NO.:
*REPORT; QUA	LITY	STATUS			Quality ASS ORGANIZATION I	RESPONSIBLE	DRL NO.:	LEVEL NO.:
			,	· · · · · · · · · · · · · · · · · · ·	ORGANIZATION FOR DOCUMENT		DDL NO.;	FILE NO.:
TYPE OF DOCUMENT: CON	ITROL	DACTION DREFERENCE	∕ INFO	RMATION		:		
1 -		to the customer f			ORGANIZATION FOR WCUMEN		NO OF 10	COPIES'
	ents a	as supported by the			EST MATED FOR SINGLE PE	REPARATION'		TION CUTOFF MILESTONE
_	rt, Qu	arterly Written			ESTIMATED (FOR SINGLE PR	COST (\$) REPARATION:		OATA DUE USER
		entract Status			FREQUENCY	OF ISSUE:	PUBLICA	TION DATE.
	al, Qı edure	iality Assurance O	perati	ng	☐ ANNUALLY ☐ SEMI-ANNUA	ALLY	SD	R
		ty Assurance Prog	gram		□ QUARTERLY □ EI-MONTHLY			FREQUENCY
CLASSIFICATION:		□ GROUP I			MONTHLY SEMI-MONTH	HLY		estone) gh launch
SECRET CONFIDENTIAL		GROUP 2 GROUP 3		AL HANDLING DISCREET	O BI-WEEKLY			MATED
D SECRET RESTRICTED DAT CONFIDENTIAL RESTRIC UNCLASSIFIED		☐ GROUP 4	□ JPL [DISCREET CT DISCREET	☐ DAILY ☐ OTHERWISE,	A\$ SPECIFIED		ION DATE
FORM OF DATA:	KIN	D OF DATA:			REFERENCE DO	CUMENTS:		
R PRINTED DOCUMEN	Γ	□ ABSTRACT		STRUCTION	NPC 200	_2		
□ CHART □ DIAGRAM		☐ BROCHURE ☐ BULLETIN	D LE		101 € 200	2		
D DRAWING		☐ CATALOG	□ LO					
☐ FILM (STATIC OR MO	TION)	□ CONTRACT		NUAL				
O ILLUSTRATION		☐ DIRECTIVE	🗆 МЕ	MORANDUM				
O MODEL		☐ DISCLOSURE		NUTES	APPLICABLE ST	ANDADDO		
☐ RECORDING (TAPE C☐ COMPUTER CARD	R DISC)	☐ ENGINEERING CHANGE ORDER		AN OCEDURE	APPLICABLE SI	ANDARDS.		
COMPUTER TAPE		□ REQUEST FOR ENGINEE						
O MICROFILM (W/OR W	(O CARD)	_	_					
O OTHER		ENGINEERING CHANGE	□ sc	HEDULE				
		PROPOSAL		ECIFICATION				
		☐ HANDBOOK ☐ INDEX		ANDARD UCHER				
REVIEWS AND/OR APPROVAL				OCHER				
		DRAFT	DATE		PREPUBLICATIO	N PROOF	ı	DATE
SUBMIT FOR REVIEW TO: -								
_		ВҮ					BY —	
_								
_								
_				 .				
SUBMIT FOR		BY					ВҮ —	
APPROVAL TO								
<u>M</u>	anage	<u>r, Quality As</u> surar	i <u>ce</u>					

VOYAGER DATA REQUIREMENT DESCRIPTION - 2ND SHEET
SPECIAL INSTRUCTIONS: DRO NO.: QA-024
SPECIAL DISTRIBUTION. (IF DISTRIBUTION IS NOT COVERED BY AN EXISTING DDL WRITE IN DISTRIBUTION BELOW)
,
OUTLINE OF CONTENTS:
 General narrative comment on the conformance of meeting the quality levels of the Voyager Program. Summarized pictorial illustrations, graphs of the various measurements of the quality performance such as: MRB activity NCMR activity Corrective actions Tests Audits With supplemental narrations on the progress in each area of activity. Conclusions on the overall quality performance.

JPL 2568-1 OCT 65

DATE DATA DRD APPROVED BY CATEGORY VOYAGER DATA REQUIREMENT DESCRIPTION ORGANIZATION ORIGINATING REOUIREMENT DRD NO.: DRD PREPARED BY: CONTRACT CODE: OFFICE RESPONSIBLE FOR DRD CODE DATE 7/28/67 OA-022 DRL ITEM ORGANIZATION RESPONSIBLE TASK OR SUBTASK TITLE OF DOCUMENT FOR DOCUMENT PREPARATION: NO.: Quality Assurance/Test REPORT, SPECIAL MEASUREMENT AND LEVEL NO. ORGANIZATION RESPONSIBLE DRL NO. TEST EQUIPMENT EVALUATION (COMPONENT) FOR DOCUMENT REPRODUCTION FILE NO. ORGANIZATION RESPONSIBLE DDL NO. FOR DOCUMENT DISTRIBUTION. TYPE OF DOCUMENT: DACTION CONTROL DREFERENCE DINFORMATION ORGANIZATION RESPONSIBLE USE OF DOCUMENT: NO OF COPIES. When analysis of the quality levels indicate a shift in FOR WCUMENT STOWAGE performance or accuracy, a special measurement and 10 INFORMATION CUTOFF ESTIMATED MANHOURS test equipment evaluation capability study is performed FDR SINGLE PREPARATION DATE OR MILESTONE: to verify the integrity and confidence in the test results, DATE DATA DUE ESTIMATED COST(\$) INTERRELATIONSHIP WITH OTHER DATA REQUIREMENTS: FOR SINGLE PREPARATION TO USER. QA-009, Plan, Quality Assurance Program QA-031, Specification, Special Test Equipment PUBLICATION DATE FREQUENCY OF ISSUE: (STE) Component ANNUALLY SEMI-ANNUALLY QUARTERLY SDR Plan, Integrated Test TE-001. UPDATE (FREQUENCY Procedure, Test Operating TE-030, MONTHLY SEMI-MONTHLY OR MILESTONE): ☐ GROUP I GROUP 2 CLASSIFICATION: BI-WEEKLY ☐ SPECIAL HANDLING □ SECRET WEEKLY GROUP 3 □ NASA DISCREET
□ JPL DISCREET ESTIMATED CONFIDENTIAL DAILY SECRET RESTRICTED DATA EXPIRATION DATE TO OTHERWISE, AS SPECIFIED ☐ PROPRIETARY CONFIDENTIAL RESTRICTED DATA □ PROJECT DISCREET **▼** UNCLASSIFIED ☐ PUBLIC DOMAIN □ NOFORN <u>One time</u> REFERENCE DOCUMENTS: KIND OF DATA: FORM OF DATA: □ INSTRUCTION EX PRINTED DOCUMENT ABSTRACT □ BROCHURE □ LETTER NPC 200-2 CHART □ BULLETIN ☐ LIST □ DIAGRAM □ DRAWING ☐ CATALOG ☐ FILM (STATIC OR MOTION) □ CONTRACT ☐ MANUAL ☐ ILLUSTRATION ☐ DIRECTIVE ☐ MEMORANDUM ☐ DISCLOSURE □ MINUTES □ MODEL APPLICABLE STANDARDS. ☐ PLAN ☐ RECORDING (TAPE OR DISC) ☐ ENGINEERING CHANGE ☐ COMPUTER CARD ORDER ☐ PROCEDURE □ COMPUTER TAPE ☐ REQUEST FOR ENGINEER-☐ REGULATION ☐ MICROFILM (W/OR W/O CARD) ING CHANGE PROPOSAL X REPORT ☐ ENGINEERING CHANGE ☐ SCHEDULE PROPOSAL ☐ SPECIFICATION ☐ HANDBOOK C STANDARD O INDEX □ VOUCHER REVIEWS AND/OR APPROVALS REQUIRED: (LIST IN ORDER OF SUBMITTAL) DRAFT DATE PREPUBLICATION PROOF DATE SUBMIT FOR REVIEW TO' SUBMIT FOR APPROVAL TO Manager, Qudlity Assurance

VOYAGER DATA REQUIREMENT DESCRIPTION - 2ND SHEET
SPECIAL INSTRUCTIONS: QA-02
Quality Assurance Engineer witnesses the special measurement and test equipment evaluation.
SPECIAL DISTRIBUTION (IF DISTRIBUTION IS NOT COVERED BY AN EXISTING ODL WRITE IN DISTRIBUTION BELOW)
,
OUTLINE OF CONTENTS:
 Procedure for the verification that the equipment is compatible with desired resolution of measurement parameters. Defines data requirements of the special test.
(CONTINUE ON THIRD SHEET IE NECESSARY AND AFEIX TO THIS DRD.)

-2-

VOYA	GER DATA F	REQUIREMENT DESCRIPTION			DRD APPROVED BY	/ :	DATE:	DATA CATEGORY:
	Jeens: L			200 20-5			CONTRACT	DRD NO.:
ORGANIZATION ORIGINATING REQUIREMENT	QA	DFFICE RESPONSIBLE FOR DF	RD: CODE	T.F. S		DATE: 7/28/67	NO.:	QA -026
TITLE OF DOCUMENT: REPORT, QU.	ALITY A	ASSURANCE	*		(HEANIZATION RELION DOCUMEN P Quality Ass	reparation urance	TASK OR SUBTASK:	DRL ITEM NO.:
AUDIT SUMM.	ARY				(IRGANIZATION REFOR DOCUMENT RE		DRL NO.:	LEVEL NO
TYPE OF OOUNTAIN	<i>-</i>		T		ORGANIZATION FOR DOCUMENT DI	STRIBUTION:	DDL NO.:	FILE NO.
USE OF DOCUMENT	NTROL [JACTION DREFERENCE	1 INFORM	1ATION	ORCANIZATION B	ECDONICIDI E	NO OF	CODIEC
USE OF DOCUMENT					ORGANIZATION R FOR DOCUMENT		NO OF	COPIES
To summarize stat		-				:	10	
documents as imposite areas of fabrication hardware.		<u> </u>			ESTIMATED M FOR SINGLE PRE			ION CUTOFF MILESTONE:
INTERRELATIONSHIP WITH OT QA-009, Plan, Qu					ESTIMATED CO FOR SINGLE PRE			ATA DUE JSER:
QA-023, Report, O	-				FREQUENCY C	F ISSUE:	PUBLICAT	ION DATE:
QA-027, Report, (Quality A	Assurance Trend S	Summa	ry	O ANNUALLY SEMI-ANNUAL QUARTERLY EI-MONTHLY	LY		REQUENCY
CLASSIFICATION:		O GROUP I			☐ MONTHLY ☐ SEMI-MONTHL	.Y	OR MILE Thru lai	ESTONE)
SECRET CONFIDENTIAL		☐ GROUP 2	SPECIAL NASA DIS	HANDLING SCREET	□ EI-WEEKLY			MATED
☐ SECRET RESTRICTED DA O CONFIDENTIAL RESTRIC MA UNCLASSIFIED		☐ GROUP 4 ☐ O PROPRIETARY C	JPL DIS	CREET DISCREET	DAILY OTHERWISE,A	\$ SPECIFIED		ON DATE:
FORM OF DATA:		OF DATA.			REFERENCE DOCU	JMENTS:		
PRINTED DOCUMEN	IT	□ ABSTRACT	☐ INSTE		NPC 20	00_2		
☐ CHART ☐ DIAGRAM		□ BROCHURE □ BULLETIN	☐ LIST	=K	111 6 20	00-2		
DRAWING		☐ CATALOG	□ LOG					
🗓 FILM (STATIC OR MO	OTION)	O CONTRACT	O MANU	JAL				
☐ ILLUSTRATION		☐ DIRECTIVE		RANDUM				
MODEL TABLE	OD DIOO)	DISCLOSURE	☐ MINU		APPLICABLE STA	NDARDS		
RECORDING (TAPE	JR DISC)	☐ ENGINEERING CHANGE ORDER	□ PROC		ATTEROABLE STA	NDANDO.		
COMPUTER TAPE		REQUEST FOR ENGINEER						
☐ MICROFILM (W/OR)	WO CARD)	ING CHANGE PROPOSAL	L 🖺 REPO	RT				
C) OTHER		O ENGINEERING CHANGE	SCHE					
	·	PROPOSAL		IFICATION				
		☐ HANDBOOK O INDEX	☐ STAN					
REVIEWS AND/OR APPROVA (LIST IN ORDER OF SUBMIT	TAL)							
	D	RAFT	DATE		PREPUBLICATION	PROOF	D	ATE
SUBMIT FOR REVIEW TO: -				 –				
<u> </u>		BY					BY	
_		D I						
-								
-								
SUBMIT FOR -							вү —	
APPROVAL TO	[on a a -		2				- —	
<u>N</u>	ianager,	<u>, Quality As</u> suran <u>c</u>	e					

DUTLINE OF CONTENTS: L. Summary of biweekly audits listing. 2. Name of area and/or operation (date of audits). 3. Findings, corrective action, completion attes and open corrective actions with promise dates of completion. 4. Overall rating for area audited and an indication of trends.		*
DUTLINE OF CONTENTS: L. Summary of biweekly audits listing. 2. Name of area and/or operation (date of audits). 3. Findings, corrective action, completion dates and open corrective actions with promise dates of completion. 4. Overall rating for area audited and an indication of trends. 5. Analysis, conclusions and recommendations.	VOYAGER DATA REQUIREMENT DESCRIPTION - 2ND SHEET	:
Submitted quarterly to Spacecraft System Office. Dutline of contents: 1. Summary of biweekly audits listing. 2. Name of area and/or operation (date of audits). 3. Findings, corrective action, completion dates and open corrective actions with promise dates of completion. 4. Overall rating for area audited and an indication of trends. 5. Analysis, conclusions and recommendations.	SPECIAL INSTRUCTIONS:	
Submitted quarterly to Spacecraft System Office. DUTLINE OF CONTENTS: 1. Summary of biweekly audits listing. 2. Name of area and/or operation (date of audits). 3. Findings, corrective action, completion dates and open corrective actions with promise dates of completion. 4. Overall rating for area audited and an indication of trends. 5. Analysis, conclusions and recommendations.	<u> ૄિય</u>	11-020
Submitted quarterly to Spacecraft System Office. DUTLINE OF CONTENTS: 1. Summary of biweekly audits listing. 2. Name of area and/or operation (date of audits). 3. Findings, corrective action, completion dates and open corrective actions with promise dates of completion. 4. Overall rating for area audited and an indication of trends. 5. Analysis, conclusions and recommendations.		
Submitted quarterly to Spacecraft System Office. DUTLINE OF CONTENTS: 1. Summary of biweekly audits listing. 2. Name of area and/or operation (date of audits). 3. Findings, corrective action, completion dates and open corrective actions with promise dates of completion. 4. Overall rating for area audited and an indication of trends. 5. Analysis, conclusions and recommendations.		
Submitted quarterly to Spacecraft System Office. DUTLINE OF CONTENTS: 1. Summary of biweekly audits listing. 2. Name of area and/or operation (date of audits). 3. Findings, corrective action, completion dates and open corrective actions with promise dates of completion. 4. Overall rating for area audited and an indication of trends. 5. Analysis, conclusions and recommendations.		
Submitted quarterly to Spacecraft System Office. DUTLINE OF CONTENTS: 1. Summary of biweekly audits listing. 2. Name of area and/or operation (date of audits). 3. Findings, corrective action, completion dates and open corrective actions with promise dates of completion. 4. Overall rating for area audited and an indication of trends. 5. Analysis, conclusions and recommendations.		
Submitted quarterly to Spacecraft System Office. DUTLINE OF CONTENTS: 1. Summary of biweekly audits listing. 2. Name of area and/or operation (date of audits). 3. Findings, corrective action, completion dates and open corrective actions with promise dates of completion. 4. Overall rating for area audited and an indication of trends. 5. Analysis, conclusions and recommendations.		
Submitted quarterly to Spacecraft System Office. DUTLINE OF CONTENTS: 1. Summary of biweekly audits listing. 2. Name of area and/or operation (date of audits). 3. Findings, corrective action, completion dates and open corrective actions with promise dates of completion. 4. Overall rating for area audited and an indication of trends. 5. Analysis, conclusions and recommendations.		
Submitted quarterly to Spacecraft System Office. DUTLINE OF CONTENTS: 1. Summary of biweekly audits listing. 2. Name of area and/or operation (date of audits). 3. Findings, corrective action, completion dates and open corrective actions with promise dates of completion. 4. Overall rating for area audited and an indication of trends. 5. Analysis, conclusions and recommendations.		
Submitted quarterly to Spacecraft System Office. DUTLINE OF CONTENTS: 1. Summary of biweekly audits listing. 2. Name of area and/or operation (date of audits). 3. Findings, corrective action, completion dates and open corrective actions with promise dates of completion. 4. Overall rating for area audited and an indication of trends. 5. Analysis, conclusions and recommendations.	SPECIAL DISTRIBUTION. (IF DISTRIBUTION IS NOT COVERED BY AN EXISTING DDL WRITE IN DISTRIBUTION BELOW)	
DUTLINE OF CONTENTS: 1. Summary of biweekly audits listing. 2. Name of area and/or operation (date of audits). 3. Findings, corrective action, completion dates and open corrective actions with promise dates of completion. 4. Overall rating for area audited and an indication of trends. 5. Analysis, conclusions and recommendations.		
 Summary of biweekly audits listing. Name of area and/or operation (date of audits). Findings, corrective action, completion dates and open corrective actions with promise dates of completion. Overall rating for area audited and an indication of trends. Analysis, conclusions and recommendations. 	Submitted quarterly to Spacecraft System Office.	
 Summary of biweekly audits listing. Name of area and/or operation (date of audits). Findings, corrective action, completion dates and open corrective actions with promise dates of completion. Overall rating for area audited and an indication of trends. Analysis, conclusions and recommendations. 		
 Summary of biweekly audits listing. Name of area and/or operation (date of audits). Findings, corrective action, completion dates and open corrective actions with promise dates of completion. Overall rating for area audited and an indication of trends. Analysis, conclusions and recommendations. 		
 Summary of biweekly audits listing. Name of area and/or operation (date of audits). Findings, corrective action, completion dates and open corrective actions with promise dates of completion. Overall rating for area audited and an indication of trends. Analysis, conclusions and recommendations. 		
 Summary of biweekly audits listing. Name of area and/or operation (date of audits). Findings, corrective action, completion dates and open corrective actions with promise dates of completion. Overall rating for area audited and an indication of trends. Analysis, conclusions and recommendations. 		
 Summary of biweekly audits listing. Name of area and/or operation (date of audits). Findings, corrective action, completion dates and open corrective actions with promise dates of completion. Overall rating for area audited and an indication of trends. Analysis, conclusions and recommendations. 		
 Summary of biweekly audits listing. Name of area and/or operation (date of audits). Findings, corrective action, completion dates and open corrective actions with promise dates of completion. Overall rating for area audited and an indication of trends. Analysis, conclusions and recommendations. 		
 Summary of biweekly audits listing. Name of area and/or operation (date of audits). Findings, corrective action, completion dates and open corrective actions with promise dates of completion. Overall rating for area audited and an indication of trends. Analysis, conclusions and recommendations. 		
 Summary of biweekly audits listing. Name of area and/or operation (date of audits). Findings, corrective action, completion dates and open corrective actions with promise dates of completion. Overall rating for area audited and an indication of trends. Analysis, conclusions and recommendations. 		
 Name of area and/or operation (date of audits). Findings, corrective action, completion dates and open corrective actions with promise dates of completion. Overall rating for area audited and an indication of trends. Analysis, conclusions and recommendations. 	OUTLINE OF CONTENTS:	
 Findings, corrective action, completion dates and open corrective actions with promise dates of completion. Overall rating for area audited and an indication of trends. Analysis, conclusions and recommendations. 		
with promise dates of completion. Overall rating for area audited and an indication of trends. Analysis, conclusions and recommendations.		
5. Analysis, conclusions and recommendations.	with promise dates of completion.	
The summary extends to all areas of fabrication, assembly, inspection and test.		
	The summary extends to all areas of fabrication, assembly, inspection and test.	

VOYAGER I	DATA REQUIREMENT DESCRIPTION		DRD APPROVED	BY:	DATE:	DATA CATEGORY
DECUIDEMENT	DDE: OFFICE RESPONSIBLE FOR DRD.	CODE DRD PREPA		DATE' 7/28/67	CONTRACT NO.	DRD NO. QA-027
TITLE OF DOCUMENT: REPORT, QUALITY A			ORGANIZATION FOR DOCUMENT Quality A	RESPONSIBLE PREPARATION'	TASK OR SUBTASK:	DRL ITEI NO.:
TREND SUMMARY			ORGANITATION FOR MT	RESPONSIBLE REPRODUCTION.	DRL NO.	
TYPE OF DOCUMENT			FOR TOTAL	RESPONSIBLE	DDL NO.:	FILE NO.
TYPE OF DOCUMENT: CONTRO	DL DACTION DREFERENCE &	. INFORMATION				
USE OF DOCUMENT:	.11.4 1 4 4 - 1		ORGANIZATION FOR DOCUME		NO. OF	
•	te all trend reports to dea abrication, assembly, in	and the second s			15)
	and to determine need for	-	ESTIMATED FOR SINGLE P		INFORMAT DATE OR I	ION CUTOF MILESTONE
INTERRELATIONSHIP WITH OTHER OA-007. Minutes. Ma	DATA REQUIREMENTS: Aterial Review Board (MR	(RB)	ESTIMATED FOR SINGLE P			ATA DUE JSER'
QA-009, Plan, Quality	Assurance Program		FREQUENCY	OF ISSUE	PUBLICAT	ION DATE
QA-021, Report, Non- QA-022, *Report, Pro-	conforming Material (NC ocess Trends	CMR)	☐ ANNUALLY O SEMI-ANNU X QUARTERLY			OR
•			O MONTHLY	(9R MILE	REQUENCY' STONE)
CLASSIFICATION:	☐ GROUP I ☐ GROUP 2 O S	SPECIAL HANDLING	SEMI-MONT O 81-WEEKLY	HLY	Thfu la	unch
O SECRET RESTRICTED DATA CONFIDENTIAL RESTRICTED UNCLASSIFIED	☐ GROUP 3 ☐ N ☐ GROUP 4 ☐ J DATA ☐ PROPRIETARY O P	NASA DISCREET PL DISCREET PROJECT DISCREET NOFDRN	☐ WEEKLY ☐ DAILY ☐ OTHERWISE	,AS SPECIFIED		MATED ON DATE:
FORM OF DATA:	KIND OF DATA:		REFERENCE DO	CUMENTS:		
PRINTED DOCUMENT		INSTRUCTION		2		
O CHART O DIAGRAM		D LETTER D LIST	NPC 200	-2		
☐ DRAWING	_ 502221	⊒ LoG				
☐ FILM (STATIC OR MOTION		⊐ MANUAL				
O ILLUSTRATION		MEMORANDUM .				
□ MODEL		MINUTES	APPLICABLE S	TANDADDS		
☐ RECORDING (TAPE OR DI☐ COMPUTER CARD	,	D PROCEDURE	AFFLICABLE 3	TANDARDS.		
COMPUTER TAPE	☐ REOUEST FOR ENGINEER- □	REGULATION				
O MICROFILM (W/OR W/O C	ARD) ING CHANGE PROPOSAL	X REPORT				
O OTHER	- ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' '	SCHEDULE				
		SPECIFICATION O STANDARD				
		O VOUCHER				
REVIEWS AND/OR APPROVALS F (LIST IN ORDER OF SUBMITTAL)		DATE	PREPUBLICATIO	N PROOF	D	ATE
OUDMIT FOR DELIENT TO						
SUBMIT FOR REVIEW TO'						-
	ВҮ				ВҮ	
						·
					<u></u>	
OUDMIT FOR						
SUBMIT FOR APPROVAL TO	ВУ				ВҮ	
Manag	ger, Quality Assurance		· · · · · · · · · · · · · · · · · · ·			

VOYAGER DATA REQUIREMENT DESCRIPTION - 2ND SHEET

SPECIAL INSTRUCTIONS:

The weekly quality trends are plotted on control charts; process averages are calculate and control limits established. Each specific area of performance, electronic shops, machine shops, sheet metal shop, assembly and test areas is plotted to indicate trends to control quality of the outgoing hardware. A summary analysis for each area is submitted to assign responsibility for control.

QA-C-7

SPECIAL DISTRIBUTION (IF DISTRIBUTION IS NOT COVERED BY AN EXISTING DDL WRITE IN DISTRIBUTION BELOW)

•

OUTLINE OF CONTENTS:

- 1. Report summarizes the process parameters within a given area that are measured for performance trends.
 - a. Mechanical machine shop
 - b. Mechanical sheet metal shop.

Typical control parameters in these areas are, dimensional surface finish, welding concentricity, procedure. Defects are assigned responsibility by shop planning, engineering, inspection planning.

- 2. Electronic shops are controlled in the following areas:
 - a. Module or printed circuits
 - b. Black box assembly
 - c. Test

Typical control parameters in these areas are: accumulations, assembly and orientation, soldering, welding, procedural and handling and defects are assigned responsibility.

, Ale	YAGER DATA P	EQUIREMENT DESCRIPTION	V		DRD APPROVED BY	,	DATE	DATA CATEGORI.
VC	DAIA R	E-GOINEMENT DESORIF HOI		<u></u>	<u></u>	<u> </u>		
ORGANIZATION ORIGINATIN REOUIREMENT	G CODE C	OFFICE RESPONSIBLE FOR	DRD: CODE	DRD PREPA	ARED BY:	DATE	CONTRACT NO.'	DRD NO.
	CM			T. F. S	myth	7/28/67		QA-028
TITLE OF DOCUMENT:					DRGANIZATION RE		TASK OR SUBTASK	DRL IT EM NO
					Oua fity	rance	OOBTAOK	110
DEDODT D	DEAR OF	INCDECTION			DRGANIZATION RE		DRL NO	LEVEL NO:
KEPOKI, D	KEAK OF	INSPECTION	g.		FOR DOCUMENT RE	PRODUCTION.		
					ORGANIZATION REFOR DOCUMENT DE		DDL NO.	FILE NO.
TYPE OF DOCUMENT	CONTROL [ACTION DREFERENCE	X INFOR	MATION				
USE OF DOCUMENT					ORGANIZATION RI		NO. OF	COPIES:
		hardware affect			TON BOCOMENT	STOWAGE.]	L5
	_	event delaying as			ESTIMATED M	ANHOURS		ION CUTOFF
and test sche	edules of the	ne overall progra	III.		FOR SINGLE PRE	PARATION:	DATE OR I	MILESTONE:
								<u> </u>
INTERRELATIONSHIP WITH	OTHER_DATA	REOUIREMENTS:	~		FOR SINGLE PRE	ST(\$) PARATION:		ATA DUE USER:
1		k of Inspection po	er Cont	ract			I	
1	End Item	Signantian Managa			FREQUENCY C	F ISSUE:	PUBLICAT	ION DATE:
1		figuration Manage ity Assurance Pr			☐ ANNUALLY ☐ SEMI-ANNUAL	ΙΥ	HDF	.
	_	eak of Inspection	_		QUARTERLY 81-MONTHLY			REQUENCY
CLASS IFICATION:	ceport, bi		. 		O MONTHLY O SEMI-MONTHL	Υ	Thru _	ESTONE):
□ SECRET		☐ GROUP I ☐ GROUP 2		L HANDLING	☐ 81-WEEKLY WEEKLY		L8	unch
O CONFIDENTIAL SECRET RESTRICTED		O GROUP 3 GROUP 4	D NASA D	SCREET	O DAILY OTHERWISE, AS	S SPECIFIED)	MATED ON DATE:
O CONFIDENTIAL RES	TRICTED DATA	O PROPRIETARY O PUBLIC DOMAIN	□ NOFORN	T DISCREET				
FORM OF DATA:		OF DATA.			REFERENCE DOCL	IMENTS:	7 - 1	
A PRINTED DOCU	MENT	☐ ABSTRACT		RUCTION	Configurati	on Mana	gement l	Manual
☐ CHART O DIAGRAM		□ BROCHURE □ BULLETIN	☐ LETT		CM 001BB	001-1B		
☐ DRAWING		□ CATALOG	□ LOG					
🛭 FILM (STATIC OF	R MOTION)	☐ CONTRACT	□ MAN	IUAL				
O ILLUSTRATION		DIRECTIVE		ORANDUM				
☐ MODEL ☐ RECORDING (TA	PE OR DISC)	☐ DISCLOSURE ☐ ENGINEERING CHANGE	☐ MINI		APPLICABLE STAI	NDARDS.		····
☐ COMPUTER CAR		ORDER		CEDURE				
☐ COMPUTER TAP	E	O REQUEST FOR ENGINE	ER- 🗖 REG	ULATION				
☐ MICROFILM (₩/∢	OR W/O CARD)	ING CHANGE PROPO						
O OTHER		PROPOSAL PROPOSAL		CIFICATION			,	
		☐ HANDBOOK	☐ STAI	NDARD				
	···········	□ INDEX	□ VOU	CHER .				
REVIEWS AND/OR APPR	OVALS REOUIR	ED:					· · · · · · · · · · · · · · · · · · ·	. , , , , , , , , , , , , , , , , , , ,
(LIST IN ORDER OF SUB		RAFT	DATE		PREPUBLICATION	PROOF	D	ATE
	5		2.112		322.3711314			:=
SUBMIT FOR REVIEW TO'								
		BY					вү	
<u> </u>								
SUBMIT FOR								
APPROVAL TO		BY					BY	
	Manager.	Quality Assuran	<u>ce</u>					

PAGE | OF 3

JPL 2568 OCT 65

VOYAGER DATA REQUIREMENT DESCRIPTION - 2ND SHEET

SPECIAL INSTRUCTIONS'

DRD **NO**.

QA-02{

In-Process Inspection makes out a Break of Inspection card with a copy to Quality Assurance Data Collection Center.

A DRD at the subcontractor/vendor level similar in content to this DRD is required.

SPECIAL OISTRIBUTION. (IF DISTRIBUTION IS NOT COVERED BY AN EXISTING DDL WRITE IN DISTRIBUTION BELOW)

OUTLINE OF CONTENTS:

- 1. Summary of the Break of Inspection cards and their status.
- 2. Contains the action taken on specific hardware affected by the break of inspection.
- 3. Shows status of parts and substitutions by serial number of the affected parts.
- 4. Shows hardware status awaiting Break of Inspection action.
- **5.** Lists hardware requiring Material Review Board action as direct result of the Break of Inspection event.
- **6.** Identifies the reinspection required to progress hardware to next level of assembly or test.

See attached form.

GENERAL ELECTRIC
MISSILE AND SPACE DIVISION
VOYAGER SPACECRAFT SYSTEM DEPARTMENT

QUALITY ASSURANCE	BREAK OF INSPECTION REPORT	
SILE AND SPACE DIVISION	ACECRAFT SYSTEM DEPARTMENT	

				KHIB		 		 		
	NEXT BOI					:	-		-	
	TIME STAMP									
EU										
KEINS I ALLEU	NO. DATE									,
S KEIN	IL NO.									
PAHIS	SERIAL			-			<u> </u>			<u> </u>
	, AN				,					
	, REV						•			
	DWG NO.									
	MCMR									
	RETRO							 :		
	NOMECL 4 ORE									
	TIME									
	DATE							 •		
6	RES									
PARTS REMOVED	REV AN		:							
PARTS	SERIAL NO.	:								
	DWG NO.									
	∑									

VOYAGER Quality Assurance Break of Inspection Report

VO	VACED DATA I	DECLUDEMENT DECORIDATION	N		DRD APPROVED B	Υ	DATE:	CATEGORY'.
VO	YAGER DATA I	REQUIREMENT DESCRIPTIO	N					
ORGANIZATION ORIGINATING	CODE.	OFFICE RESPONSIBLE FOR	DRD: COD	DE DRD PREP	ARĒD BY.	DATE.	CONTRACT	DRD NO.:
REQUIREMENT	QA			T. F. 8	Sn avth	7/28/67	NO.	QA-029
TITLE OF DOCUMENT	1 (21)		<u>-</u>	1 1. 1. *	IRGANIZATION R		TASK OR	DRL ITEM
					FOR DOCUMENT F		SUBTASK:	NO.:
ı *RFP∩RT F∆II	LIRE CA	TEGORIZATION			Assu	rance		
KEI OKI, 17HE	ZOILL CIT	TEGORIE THOI			ORGANIZATION R		DRL NO.:	LEVEL NO.
,								
		,			ORGANIZATION R	ESPONSIBLE	DDL NO.;	FILE NO.
					FOR DOCUMENT D	ISTRIBUTION:		
Land to the second seco	CONTROL (DACTION DREFERENCE	∭ INFO	RMATION				
USE OF DOCUMENT' Computerize and	categori	zation of and as	signing	g respon-	ORGANIZATION R FOR DOCUMENT		NO OF	COPIES.
_	_	regard to: (1)cla	-	-			10	
		ring which failure			ESTIMATED M	IANHOURS	INFORMAT	ION CUTOFF
` ′		ilure; (4) descrij			FOR SINGLE PRI		DATE OR	MILESTONE;
		ecords at time of	-					
INTERRELATIONSHIP WITH				*	ESTIMATED CO FOR SINGLE PR		1	ATA DUE JSER:
		Assurance Progra	am					JULIN.
QA-020 *Repor	-	_			FREQUENCY (OF ISSUE'	PUBLICAT	ION DATE.
QA-021, Repor	t, Nonco	onforming Materia	al (NCI	MR)	☐ ANNUALLY		1 00210711	
RA-009, Plan,	Reliabil	ity Program			☐ SEMI-ANNUAL	LLY	HD	
					B1-MONTHLY MONTHLY			REQUENCY STONE)
CLASS IFICATION:		☐ GROUP I			SEMI-MONTHI	LY	Thru lau	nch
☐ SECRET ☐ CONFIDENTIAL		☐ GROUP 2 ☐ GROUP 3	□ NASA	AL HANDLING DISCREET	□ WEEKLY □ DAILY		ESTIN	MATED
□ SECRET RESTRICTED□ CONFIDENTIAL REST		☐ GROUP 4 ☐ PROPRIETARY	☐ JPL [☐ PROJE	DISCREET ECT DISCREET	OTHERWISE, A	\$ SPECIFIED	EXPIRATI	ON DATE
™ UNCLASSIFIED		☐ PUBLIC DOMAIN	□ NOFO	RN				
FORM OF DATA:	KIND	OF DATA.			REFERENCE DOC	UMENTS:		
O PRINTED DOCUM	IENT	☐ ABSTRACT		STRUCTION				
☐ CHART ☐ DIAGRAM		☐ BROCHURE ☐ BULLETIN	☐ LIS					
DRAWING		O CATALOG	☐ LO					
☐ FILM (STATIC OR	MOTION)	□ CONTRACT		ANUAL				
☐ ILLUSTRATION		☐ DIRECTIVE	🗆 МЕ	MORANDUM				
☐ MODEL		DISCLOSURE		NUTES	ABBUIGABUE OTA	ND A D D O		
☐ RECORDING (TAP ▼ COMPUTER CARD	,	ORDER CHANGE		AN OCEDURE	APPLICABLE STA	INDAKD2		
COMPUTER CARD		REQUEST FOR ENGINE						
☐ MICROFILM (₩/O		ING CHANGE PROPO						
☐ OTHER		ENGINEERING CHANGE	≣ 🗖 sc	HEDULE				
		PROPOSAL		ECIFICATION				
		☐ HANDBOOK O INDEX		ANDARD UCHER				
		O INDEX		JULIN				
REVIEWS AND/OR APPRO		RED:						
(LIST IN ORDER OF SUBN		RAFT	DATE	<u> </u>	PREPUBLICATION	PROOF	D	ATE
SUBMIT FOR REVIEW TO'								
į ·								
		BY					ВҮ	
CLIDMIT FOR								
SUBMIT FOR APPROVAL TO		ВҮ					ВҮ	
	Manager	, Quality Assura	nce					

SPECIAL INSTRUCTIONS.	DRD NO. QA-025
SPECIAL DISTRIBUTION. (IF DISTRIBUTION IS NOT COVERED BY AN EXISTING DDL WRITE IN OISTRIBUTION BELOW)	
OUTLINE OF CONTENTS:	
Computer cards bear information regarding: 1. Failure report number	
Computer cards bear information regarding: 1. Failure report number 2. Equipment identification/name 3. Equipment categories	
Computer cards bear information regarding: 1. Failure report number 2. Equipment identification/name 3. Equipment categories a. Subsystem b. Class of equipment	
Computer cards bear information regarding: 1. Failure report number 2. Equipment identification/name 3. Equipment categories a. Subsystem b. Class of equipment 4. Environmental test during which failure occurred 5. Test level at the instant of failure	
Computer cards bear information regarding: 1. Failure report number 2. Equipment identification/name 3. Equipment categories a. Subsystem b. Class of equipment 4. Environmental test during which failure occurred	

VOYAGER DATA REQUIREMENT DESCRIPTION				DRD APPROVED BY:		DATE:	DATA CATEGORY:		
ORGANIZATION ORIGINATING REQUIREMENT.	1	OFFICE RESPONSIBLE FOR	DRD: CC	1		DATE	CONTRACT NO.:	DRD NO.:	
REQUIREMENT.	QA			J.R.	Gottshall	7/28/67		QA-030	
TITLE OF DOCUMENT' REPORT, QUALIFICATION STATUS				ORGANIZATION RIFOR DOCUMENT POQUALITY Assum	DEDVD V TIVIL	TASK OR	DRL ITEM		
REFORT, QUIENTOTVETTION				ORGANIZATION R FOR DOCUMENT RI		DRL NO.:	LEVEL NO.:		
*					ORGANIZATION R FOR DOCUMENT D		DDL NO.:	FILE NO.:	
TYPE OF DOCUMENT:	CONTROL	DACTION DREFERENCE	O INF	ORMATION				<u> </u>	
USE OF DOCUMENT.		wasan in Santana		myang i giri Manag malambi	ORGANIZATION R		NO. OF	COPIES:	
To report to the	custom	er the status of the	Туре	e	FOR DOCUMENT	STOWAGE.	10		
Approval Progra	am.			^	ESTIMATED N	IANHOLIPS	10	TION CUTOFF	
					FOR SINGLE PRI			MILESTONE:	
	Bidder	A REOUIREMENTS:	eratin	σ	ESTIMATED C FOR SINGLE PRI			ATA DUE USER:	
	edures	nty rissurance ope	Ji atiii,	6	FREQUENCY (OF ISSUE.	PUBLICAT	TION DATE:	
QA-009, Plan, QA-024, *Repo	Quality ort, Quali	Assurance Progra ity Status	am		O ANNUALLY SEMI-ANNUAL QUARTERLY BI-MONTHLY	LLY		PDR	
_	rt, Test				MONTHLY	V		ESTONE).	
CLASSIFICATION: O SECRET		☐ GROUP I O GROUP 2	□ SPEC	CIAL HANDLING	SEMI-MONTHI	LY	Thru lai	ınch	
☐ CONFIDENTIAL ☐ SECRET RESTRICTED ☐ CONFIDENTIAL RES' ☑ UNCLASSIFIED		☐ GROUP 3 ☐ GROUP 4 A ☐ PROPRIETARY ☐ PUBLIC DOMAIN	O NASA	A DISCREET DISCREET JECT DISCREET	DAILY OTHERWISE AS SPECIFIED		ESTIMATED EXPIRATION DATE		
FORM OF DATA:	KIN	D OF DATA.			REFERENCE DOC	UMENTS:			
printed docui	MENT	O ABSTRACT	□ II	NSTRUCTION					
O CHART		□ BROCHURE		ETTER	NPC-200)–2			
☐ DIAGRAM ☐ DRAWING		☐ BULLETIN☐ CATALOG	O 17						
☐ FILM (STATIC OF	R MOTION)	O CONTRACT		IANUAL					
☐ ILLUSTRATION		O DIRECTIVE		IEMORANDUM					
□ MODEL		☐ DISCLOSURE	□ N	MINUTES					
☐ RECORDING (TAI	PE OR DISC)	ENGINEERING CHANGE			APPLICABLE STA	NDARDS			
O COMPUTER CAR		ORDER		ROCEDURE					
COMPUTER TAP		O REQUEST FOR ENGINE ING CHANGE PROPORTIONS OUT OF THE PROPORTION							
☐ MICROFILM (₩/0	JR W/O CARD)	O ENGINEERING CHANGE		CHEDULE			1		
		PROPOSAL		PECIFICATION					
		O HANDBOOK	o s	TANDARD					
		☐ INDEX	□ V	OUCHER					
REVIEWS AND/OR APPRO							_		
ļ		DRAFT	DAT	l E	PREPUBLICATION	PROOF	С	DATE	
SUBMIT FOR REVIEW TO:									
SUBIVITI FOR REVIEW TO.		_							
		ВҮ					ВҮ		
•				 •					
									
SUBMIT FOR		BY		-			BY		
APPROVAL TO	APPROVAL 10								
	Manager	r <u>. Quality Ass</u> uran	ce						

VOYAGER DATA REQUIREMENT DESCRIPTION - 2ND SHEET

SPECIAL INSTRUCTIONS:

Submitted to the customer initially then monthly as part of Quality Status Report.

SPECIAL DISTRIBUTION: (IF DISTRIBUTION IS NOT COVERED BY AN EXISTING DDL WRITE IN DISTRIBUTION BELOW)

OUTLINE OF CONTENTS:

- 1. Matrix consisting of:
 - a. End item list to be qualified
 - b. Dates for
 - (1) Hardware availability
 - (2) Test facilities availability
 - (3) Test procedure availability
 - (4) Environmental tests
- 2. Narrative of:
 - a. Completed tests
 - **b.** Significant events
 - (1) Milestones
 - (2) Problems/solutions
 - c. Expenditures act/planned

VOYAGER DATA REQUIREMENT DESCRIPTION			DRD APPROVED BY		DATE	DATA CATEGORY.					
ORGANIZATION ORIGINATING REQUIREMENT	CODE	OFFICE RESPONSIBLE FOR	R DRD C	CODE.	DRD	PREPA	ARED BY	DATE:	CONTRACT NO	DRD NO.	
VEXOUVEINIEM I	QA	<u></u>			J. F	?. G	ottshall	7/28/67		QA-031	
TITLE OF DOCUMENT SPECIFICATION, SPECIAL TEST EQUIPMENT				organization re for document p 'Quality Ass		TASK OR SUBTASK	DRL ITEM NO				
(STE), COMPONENT			ORGANIZATION RI FOR DOCUMENT RE	ESPONSIBLE	DRL NO	LEVEL NO					
							ORGANIZATION RI		DDL NO	FILE NO	
TYPE OF DOCUMENT TO CONT	ROL I	DACTION DREFERENCE	OIN	FORM	ATION						
USE OF DOCUMENT							ORGANIZATION R		NO OF	COPIES	
To definitize the co	npone	ent special test		_			FOR DOCUMENT	STOWAGE	10		
equipment design an	_	•		_			ESTIMATED M	ANHOURS	INCORMA	TION CUTOFF	
requirements.							FOR SINGLE PRE			MILESTONE	
INTERRELATIONSHIP WITH OTHE QA-009, Plan, Qu	ality A	Assurance Progr	am		,		ESTIMATED CO FOR SINGLE PRE		i .	DATA DUE USER	
TE-001, Plan, Int	_		ame)				FREQUENCY (F ISSUE	PUBLICA	TION DATE	
TE-123, Plan, Spo Verificati		Test Equipment ((S1E)				☐ ANNUALLY ☐ SEMI-ANNUAL	ΙΥ		DR	
							☐ QUARTERLY ☐ 81-MONTHLY ☐ UPDATE (FRE				
CLASSIFICATION GROUP I SEMI-MONTHLY SECRET O GROUP 2 SPECIAL HANDLING SEMI-WEEKLY O GROUP 2 SPECIAL HANDLING SEMI-WEEKLY O GROUP 2 SPECIAL HANDLING SEMI-WEEKLY			As required through FACI								
☐ CONFIDENTIAL ☐ SECRET RESTRICTED DATA ☐ CONFIDENTIAL RESTRICTE ☑ UNCLASSIFIED	D DATA	☐ GROUP 3 ☐ GROUP 4 ☐ PROPRIETARY ☐ PUBLIC DOMAIN	□JP	L DISC OJECT	CREET CREET DISCR		O DAILY-			ESTIMATED EXPIRATION DATE	
FORM OF DATA	KIND	O OF DATA					REFERENCE DOC	JMENTS	•		
N PRINTED DOCUMENT		□ ABSTRACT		INSTR	UCTIO	N	JPL Config	ouration 1	Manager	nent	
☐ CHART		□ BROCHURE		LETTE	R		Manual Manual	, 41 411 011 1	viunugei		
☐ DIAGRAM ☐ DRAWING		☐ BULLETIN☐ CATALOG		LIST							
☐ FILM (STATIC OR MOTI	ON)	☐ CONTRACT		MANU	AL						
☐ ILLUSTRATION		O DIRECTIVE		MEMO	RANDU	JM					
☐ MODEL ☐ RECORDING (TAPE DR	DISC)	☐ DISCLOSURE O ENGINEERING CHANG	_	MINUT PLAN			APPLICABLE STA	NDARDS			
COMPUTER CARD	DISC)	ORDER ORDER			EDURE						
O COMPUTER TAPE		REQUEST FOR ENGINE	ER- 🗆	REGU	LATION	N					
☐ MICROFILM (W/OR W/O	CARD)	ING CHANGE PROPO									
☐ OTHER		O ENGINEERING CHANG PROPOSAL			FICATI	ION					
		O HANDBOOK		STANE							
		O INDEX	0	VOUCH	HER						
REVIEWS AND/OR APPROVALS (LIST IN ORDER OF SUBMITTA	L)					_		DD005		DATE	
	[DRAFT	אָט	ATE			PREPUBLICATION	PROOF		DATE	
SUBMIT FOR REVIEW TO'					_	_					
		ВҮ			_	-			вү —		
					_	_					
					_	_					
_					_	_					
SUBMIT FOR APPROVAL TO		ВҮ				_			ВҮ		
-	ager.	Quality Assuran	.c <u>e</u>		_						

GE EXHIBIT DRD QA-031 VOYAGER DATA REQUIREMENT DESCRIPTION - 2ND SHEET DRD NO.: SPECIAL INSTRUCTIONS: QA-03 Cognizant Quality Assurance engineers will prepare the requirements section of the STE Specification to initiate design. SPECIAL DISTRIBUTION (IF DISTRIBUTION IS NOT COVERED BY AN EXISTING DDL WRITE IN DISTRIBUTION BELOW) OUTLINE OF CONTENTS: Scope - outline of specification applicability. 1. 2. Applicable documents - component specification, workmanship standards, etc. Requirements - measurement tolerances, safety, operability, etc. 3. Test and verification - test requirements for the equipment prior to use with flight 4. hardware, measurement studies, etc. 5. Preparation **for** delivery **-** special handling requirements. 6. Notes - as applicable.

DOCUMENTATION RELATIONSHIP TREES

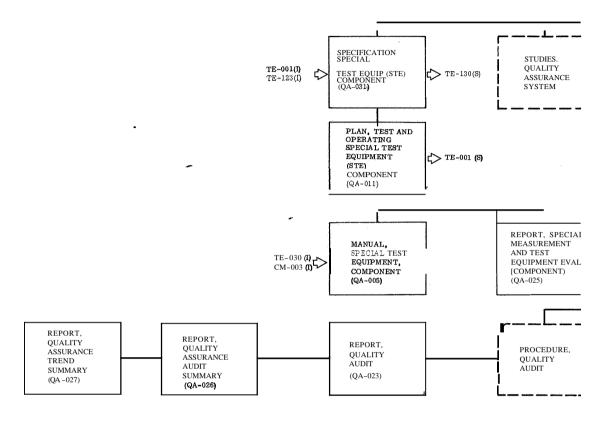
A documentation relationship tree has been prepared to show the relationships of data items within each functional category as well as their relationships across categories.

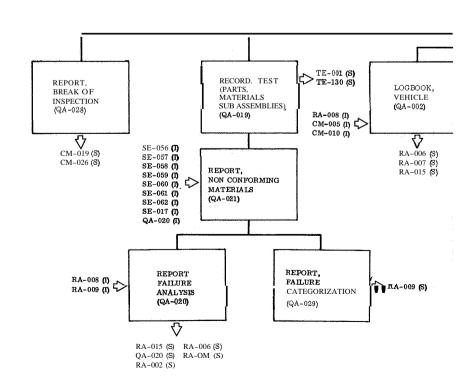
Relationships within each functional category are shown by constructing a tier pattern beginning with the top-level (or governing) data item and relating in descending order all data items within the category to this top-level data item. (The location of a data item at a given level on the diagram does not necessarily indicate the importance of that specific item but identifies and defines its relation to all other data items in that category.)

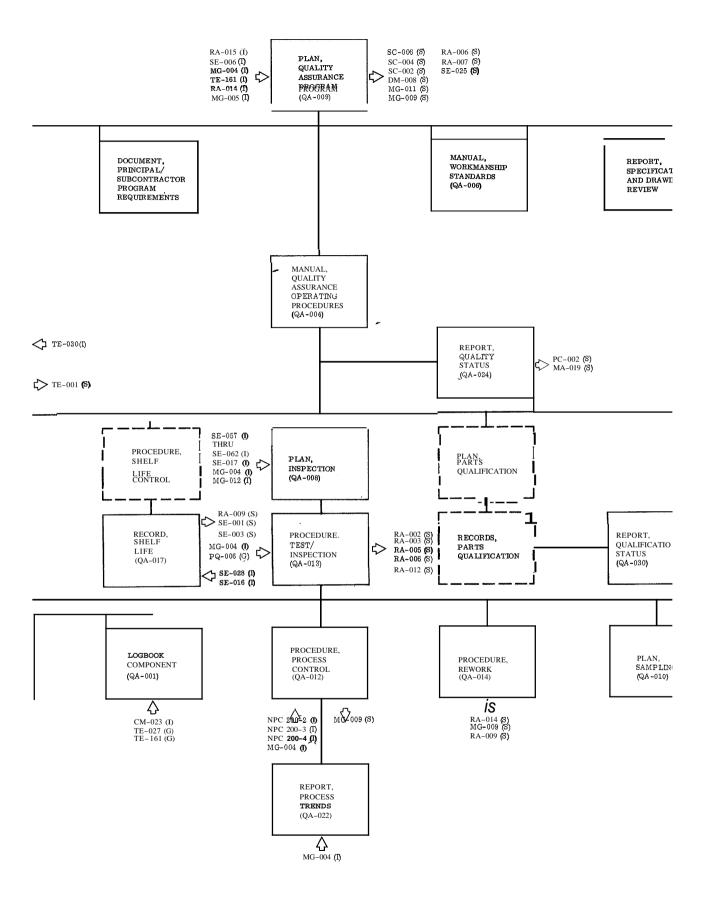
Relationships between data items in one category and data items in other functional categories are shown by (1) shaded arrows to indicate the direction of the relationship and (2) an alphabetic code to indicate the nature of the interrelationship as follows:

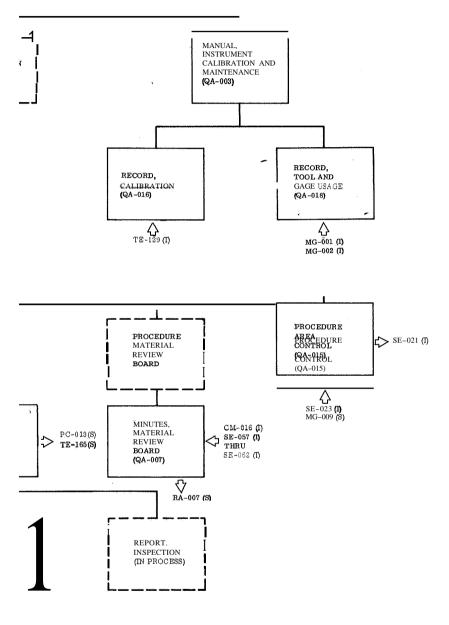
- a, Data items needed for preparation and/or support of the referenced item. (I)
- b. Data items that are supported or needed by this data item. (S)
- c. Data items that relate "to" and provide information of a general nature but are not required in an input or support role. (G)

Each data item appearing on the Data Item List (DIL) was examined and evaluated with respect to its contribution to, or dependence upon, data items appearing in other categories and is included in the diagrams. Additionally, certain data elements indicated in the user flow diagrams (but currently not identified as individual data items) have been shown within a dashed rectangle to clarify relationships.









LEGEND:

- (1) INDICATES DATA JTEMS NEEDED FOR PREPARATIONOR SUPPORT OF THE REFERENCED ITEM (INPUT).
- (S) INDICATES DATA ITEMS THAT ARE SUPPORTED OR NEEDED BY THIS ITEM.
- (G) DATA JTEMS THAT RELATE TO AND PROVIDE INFORMATION OF A GENERAL NATURE BUT ARE NOT REQUIRED IN AN INPUT OR SUPPORT ROLE

 \bigwedge indicates principal relationship $\P E_{\!\!\!\! p}$ or G) between data jtems in other functional categories.

Figure E-5. Quality Assurance Documentation Relationship Tree (QA)

DATA ITEM PHASING/FREQUENCY

Preparation requirements for Quality Assurance data items are shown in Quality Assurance Data Item Phasing and Frequency Matrix, Figure **E-6.** With the exception of control and administrative-type data items, Quality Assurance document needs have a direct relationship with the scope and complexity of the hardware program and range from piece part to system level.

The basis for compilation of these estimates are:

- a. Comparisons with other spacecraft systems, the makeup of which can be accurately described in terms of the total number of piece parts used and the percentages of non-electronic piece parts used. In the case investigated (a total of 11,740 piece parts, excluding OSE), the percentages were approximately 89 percent electronic and 11 percent non-electronic.
- b. Assume that each Voyager Spacecraft will contain approximately 100,000 piece parts.
- c. For each Voyager Spacecraft, assume it will be composed of:
 - 28 Prime Equipment CEI's
 - 36 Identification Item CEI's
 - 85 Engineering Critical Components CEI's (Configuration Management)
 Plan, Phase IB)
 149

Assume 11 Subassemblies for each Identification Item 11 x 36 396

Assume 34 Subassemblies for each Engineering Critical Component 34 x 85

2,040

Total Spacecraft Assemblies

2,585

d. Eight equivalent Spacecraft then would contain 8 x 2, 585 testable assemblies

20,680

- e. For OSE, AHSE and MDE assume:
 - 36 Prime Equipment CEI's
 - 135 Identification Items (CEI's)

1

18 Engineering Critical Components (CEI's)
(from Configuration Management Plan, Phase IB)
189

	Assume:	
	11 Subassemblies for each Identification item	
	(CEI's) 11x 135	1,485
	Assume:	
	24 Subassemblies for each Engineering Critical	
	Components (CEI's) 24 x 18	432
	Total OSE, AHSE and MDE Assemblies	2,106
	Assume two sets OSE	4,212
	Total Spacecraft Assemblies	20,680
	S/C, OSE, AHSE, MDE total assemblies	24,892
	Assume:	
	Average of four tests per assembly (acceptance testing,	
	Eng. Dev. Testing, T/A Testing, PTM Testing, Flight	
	Accept. Testing and retesting requirements	568 tests
f.	From Para. E. 2. a the number of piece part test records can be calculated.	
	8 equivalent S/C x 89,000 + 20 percent excess	726,220
	assume an average of two test records for each	
	electronic piece part	1,452,440
	8 equivalent S/C x 11,000 non-electronic piece parts.	
	Assume an average of one test record for each part.	88,000
	Total S/C Piece Part Test Records	1,540,440
g.	Using as a basis the ratio of estimated drawings for the Spaceci versus the OSE:	raft
	OSE will contain approximately 70,000 piece parts	
	Assume two sets of OSE will be produced	140,000

The Quality Assurance Data Item Density Profile, Figure E-7, shows the distribution and density of data item preparation requirements. Requirements are shown by monthly

1,680,440

6-2

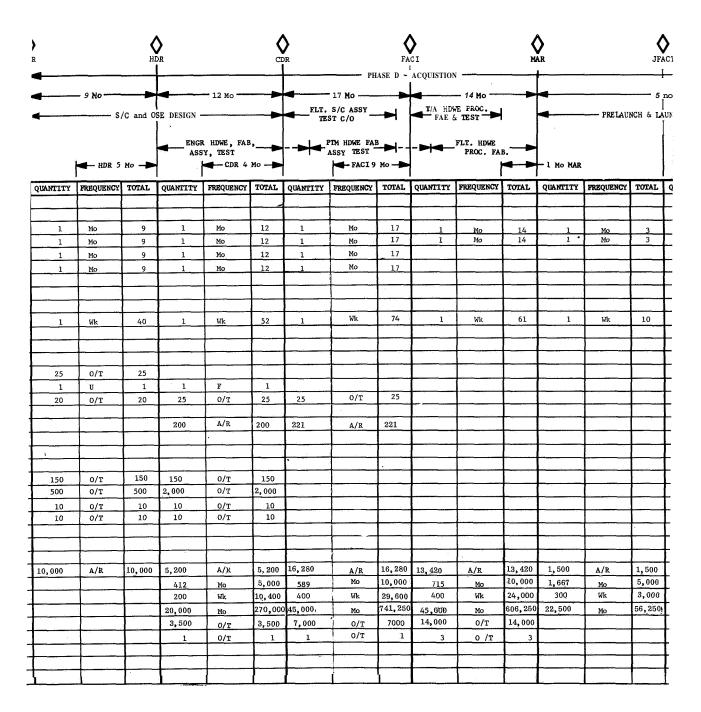
Piece Part Test Record Total

averages and reflect both formal and key informal data items. Of particular interest is the impact caused by data item QA-019, Test Records (Materials, Parts, Subassemblies).

	PHASE C - SYSTEM DEFINITION						
QUALITY ASSURANCE (QA)]						
DATA ITEM TITLE	QUANTITY	FREQUENCY	TOTAL	QUANTITY	PDR 2	Mo -	
MANUALS							
	, , , , , , , , , , , , , , , , , , ,	1.					
QA-003 Manual, Instrument Calibration & Maint.				1	Мо		
QA-004 Manual, Quality Assurance Operating Proceed	. 1	I	1	1	Мо		
QA-005 Manual, Special Test Equipment, Component	1						
QA-006 Manual, Workmanship Standards				1	Мо		
MINUTES							
					-	Г	
QA-007 Minutes, Material Review Board				1	Wk.		
PLANS	<u> </u>						
QA-008 Plan, Inspection				25	0/T		
QA-009 Plan, Quality Assurance Program	1	I	1	1	U		
QA-010 Plan, Sampling				10	0/T		
QA-011 Plan, Test and Operating, for Special							
Test Equip. (STE) Component							
PROCEDURES						Π	
QA-012 Procedure, Process Control				100	0/T	10	
QA-013 Procedure, Test/Inspection				100	0/T	10	
QA-014 Procedure, Rework							
QA-015 Procedure, Area Control							
RECORDS		1					
						L	
QA-016 Record, Calibration							
QA-017 Record, Shelf Line		ļ				<u> </u>	
QA-018 Record, Tool and Gauge Usage						<u>L</u>	
QA-019 Record, Test (Materials, Parts, Sub-Assemb)	<u> </u>	<u> </u>				_	
QA-001 Logbook, Component							
QA-002 Logbook, Vehicle							
						$oxedsymbol{oxed}$	
		<u> </u>				L	
(continued on page 2)	1	1	l .	!-	I	L	

*Key Informal Data

A	Annual	O/T	One Time	I	Initial
S/A	Semi-Annual	A/R	As Required	F	Final
wĸ	Weekly	U	update	n/r	New and 1
MO	Monthly	I/U	One Update	SDR	System D Prelimin:
B/W	Bi-Weekly	DA	Daily	PDR	
B/M	Si-Monthly	Q	Quarterly	HDR	Hard Des



CDR

Critical Design Review

rised gn Review Design Review FACI MAR First Article Configuration Inspection Mission Acceptance Review J FACT

Joint Flight Acceptance **Composite Testing**

Review

6-6-1

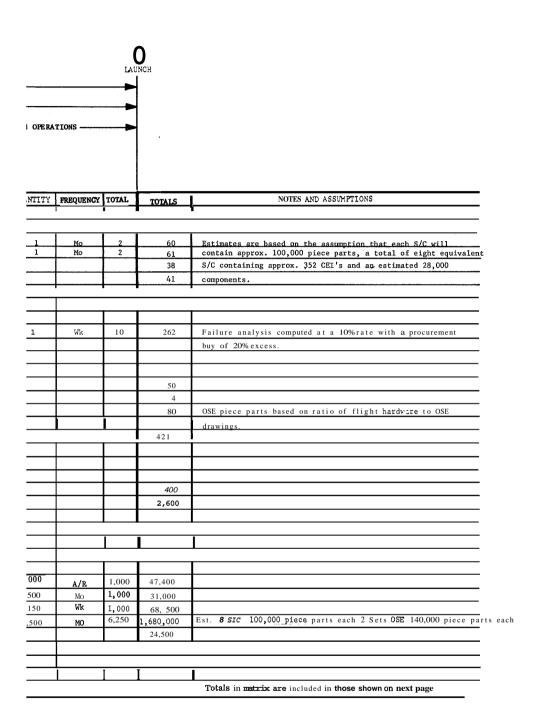
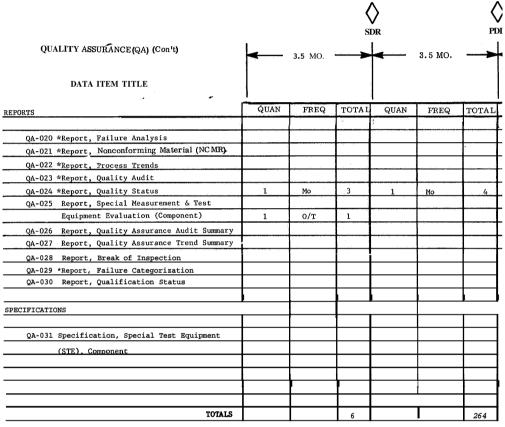
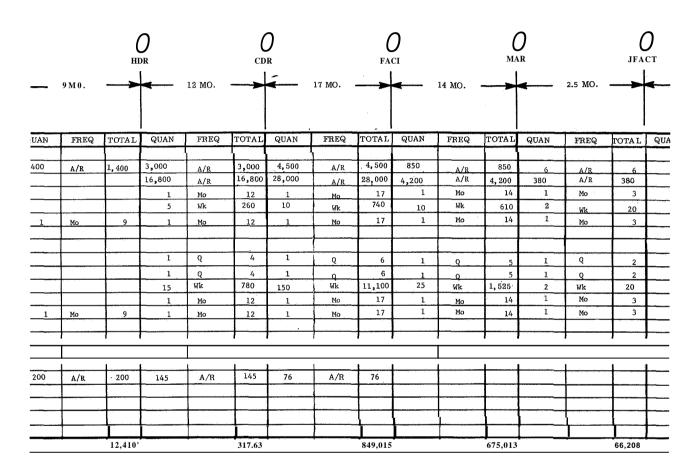


Figure E-6. Quality Assurance Data Item Phasing and Frequency Matrix (Sheet 1 of 2)



*Kev	Informal	Data

A	Annual	O/T	One Time	I	Initial
S/A	Semi-Annual	A/R	As Required	F	Final
WK	Weekly	U	update	N/R	New and Revise
MO	Monthly	I/U	One Update	SDR	System Design I
B/W	Bi-Weekly	DA	Daily	PDR	Preliminary De
B/M	Bi-Monthly	0	Quarterly	HDR	Hard Design Re



CDR

FACI MAR

Critical Design Review
First Article Configuration Inspection

J FACT

Mission Acceptance Review

iew n Review Joint Flight Acceptance Composite Testing

6-8-1

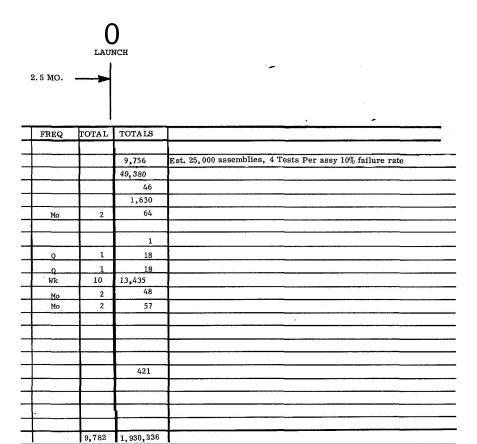


Figure **E-6.** Quality Assurance Data Item Phasing and Frequency Matrix **(Sheet** 2 of 2)

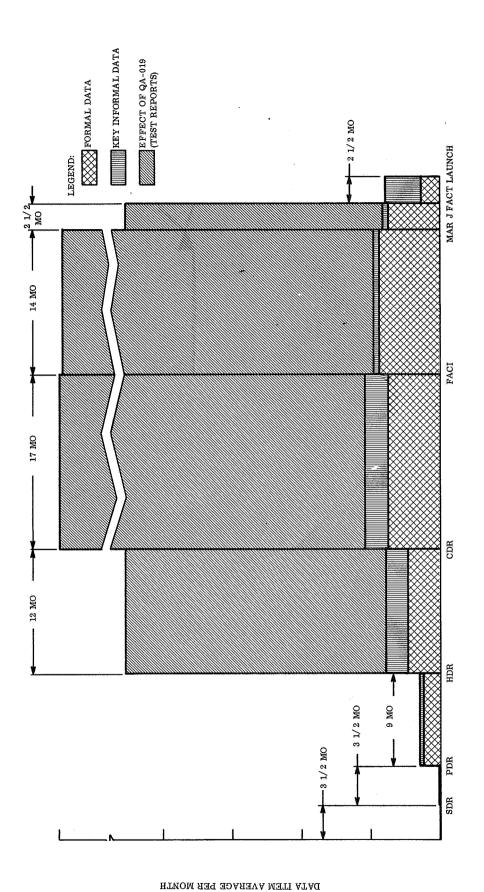


Figure E-7. Quality Assurance Data Item Density Profile